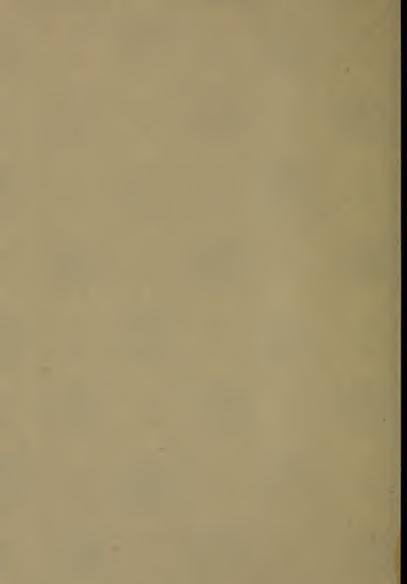
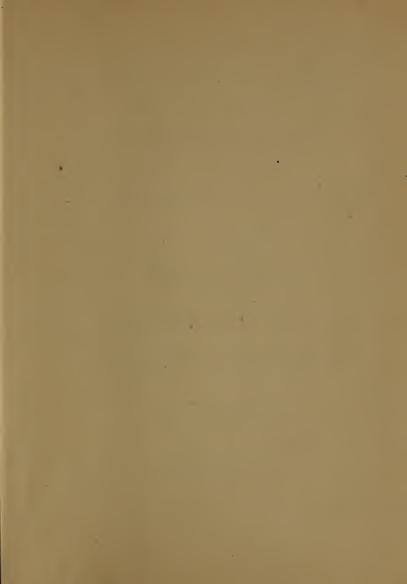
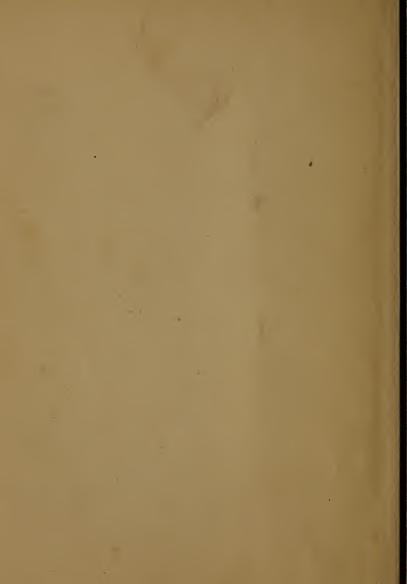
PN 4157 .B5

1895

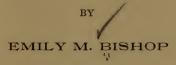






Self-Expression and Health.

AMERICANIZED DELSARTE CULTURE



To train the mind and neglect the body is to produce a cripple. $\!-\!Plato.$

Man knows himself only so far as he makes himself objective. The great word with Froebel was self-expression.—Susan T. Blow, in "Symbolic Education."

FIFTH EDITION, REVISED

CHAUTAUQUA, N. Y.
PUBLISHED BY THE AUTHOR
1895



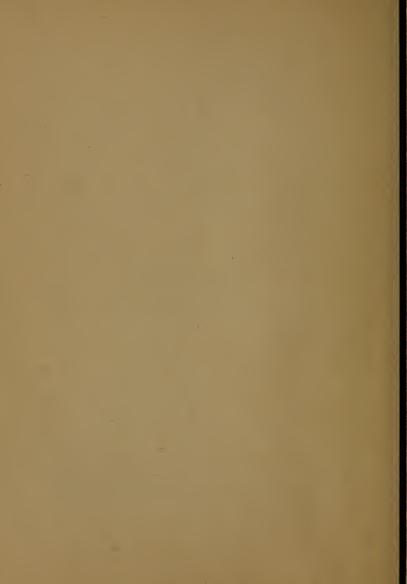
PN 4157 B 595

Copyright, 1892, 1895, By Emily M. Bishop.

TO

MY PUPILS

THIS LITTLE BOOK IS CORDIALLY DEDICATED.



CONTENTS.

Preface	9
I.	
Hints for Study	11
II.	
Gymnastics of Expression—Lesson Talk.	22
III.	
Health and Grace—Lesson Talk	30
IV.	
How We Stand—Lesson Talk	40
1 V.	
Poise—Exercises for Practice	47
VI.	100
Relaxation, Receptivity, Recuperation	
Lesson Talk	60
VII.	
How to Rest—Exercises for Practice	70
VIII.	
The Breath of Life—Lesson Talk	83
IX.	
Respiration—Exercises for Practice	91
X.	
Walking—Exercises for Practice	103

Contents.

XI.	
Sitting: Rising—Exercises for Practice	116
XII.	
Corpulency—Lesson Talk	124
XIII.	
Evading Old Age—Lesson Talk	129
XIV.	
The Secret of Symmetry and Youthfulness—	
Exercises for Practice	135
XV.	
Insomnia—Lesson Talk	152
XVI.	
Wooing Morpheus—Exercises for Practice	162
XVII.	
Nervousness—A Cause and a Cure—Lesson	
Talk	171
XVIII. ·	
Expression: Repression—Lesson Talk	182
XIX.	
Suggestions to the Sick and Others	191
Explanatory Note	199

PREFACE TO REVISED EDITION.

THIS little volume was originally written to meet the demand of those who studied with Miss Dorothy Bishop and myself for a book that should contain the "whys, hows, and wherefores" of our preliminary course in Self-Expression and Health culture. Not only former pupils, but unknown friends—physicians, teachers, students and many others—have generously expressed appreciation of its helpful teachings. The desire that this helpfulness may continue and increase has prompted this revision of the book and the insertion of a new chapter, "Hints for Study."

The suggestions contained in that chapter will, it is believed, make the book more available as a text-book for schools, for classes in physical education and in elocution. A true voice and a natural use of it are impossible if the physical instrument of expression—the body—lacks in power, elasticity and responsiveness. In the Chautauqua School of Expression (Chautauqua Assembly, Chautauqua,

N. Y.), Self-Expression and Health culture is found to be an important preparation for higher literary and dramatic interpretation.

The exercises herein are intended to meet the varied needs of the different members of general classes; such classes being usually composed of grandmothers, mothers and daughters—with an occasional gentleman. In order to make the teaching simple and direct, all technical terminology has been avoided, and a colloquial style preferred; every exercise is explained in detail and particular cautions are given regarding incorrect or careless practicing.

The Lesson Talks are reports of informal class lectures and should be studied in connection with the exercises for practice, as they relate to physiological and psychological conditions.

Acknowledgment is made to Miss Gwyneth King, my pupil and assistant teacher, for valuable aid in this revision.

It is hoped that all who read this little book may gain new inspiration to make the body a fit "temple for the indwelling soul."

EMILY M. BISHOP.

SELF-EXPRESSION AND HEALTH.

T.

HINTS FOR STUDY.

All time and money spent in training the voice and the body is an investment that pays a larger interest than any other.

-Gladstone.

He who does not take time for exercise will have to take time for illness.

-Lord Derby.

"It is not expected that the exercises herein given will all be practiced every day. The particular benefits to be derived from each exercise have been carefully stated; each person should make out his individual 'Day's Order' for practice by selecting such exercises as especially meet his needs."

The above suggestions, which appeared in former editions of this book, have proved inadequate to the needs of those who have studied with us and who desire to continue the work by themselves. Many persons have asked for particular directions for individual practice; others have declared that, rather than attempt to arrange a list of exercises for daily practice, they had practiced the exercises in the order given in the book.

The arrangement in the book is in logical order in relation to the subjects treated—all of the exercises for relaxation being under that topic, all of the exercises for walking being under that topic, and so on, irrespective of cumulative effects. Obviously, there can be no natural sequence as regards practice, nor any relation to special results desired by different individuals, in such an arrangement of exercises. Therefore, that greater benefit may result from systematic individual practice, a list—Exercises for Special Purposes—and three different classifications of exercises—Series I., II. and III.—for general practice, are given below.

It is suggested that Series I. be practiced exclusively each day for two weeks, followed by Series II. and Series III., each for the same length of time; and then, that this same order be repeated. In this way, there will be sufficient variety to maintain one's interest, and such order of practice will make evident improvement in execution and results; for instance, no one, who has regularly practiced each of the three series for two weeks, can fail to see a marked improvement when Series I. is taken up the second time. "Practice makes perfect."

A general outline for daily practice should consist first, of some relaxing exercise to free the body from all restriction; then, some energizing ones to invigorate all the processes; and last of all, some harmonious ones to tranquilize the nerves.

How much should one practice each day? Devote from ten to thirty minutes to special practice and the remainder of the day to general practice—to *living the truth* in bodily expression, which is the only telling practice. At all times, sit well, stand well, walk well, avoid jerky, irritating movements, relax all parts of the body that are not energized for some definite purpose.

FOR GENERAL PRACTICE.

SERIES I.

For muscular freedom:—Exercises xv., ix., x.

For invigoration:—Exercises xxxii., xxxiv., xxx., xix., xvii.

For harmony of movement:—Exercises xxv., xvi., xxxv., xviii.

SERIES II.

For muscular freedom:—Exercises vi., vii., xiv., xv., ii.

For invigoration:—Exercises i., xxii., xxix., xx., xxxvii.

For harmony of movement:—Exercises v., xxvii., xxxiii., xxiii., xii.

SERIES III.

For invigoration:—Exercises iv., xxxvi., xxiv., xxxi., xxi., xxl.

For muscular freedom:—Exercises xi., viii., xiii., xv.

For harmony of movement:—Exercises xxvi., xxxiv., xxviii., xli., xlii.

EXERCISES FOR SPECIAL PURPOSES.

To develop the lungs and chest:—Exercises xv., xvii., xx., xxi., xxii., xxx., xxxi.

To prevent and reduce corpulency:—Exercises xiv., xv., xix., xx., xxi., xxx., xxxii., xxxiii., xxxiv., xxxvi., xxxvii.

To allay nervousness:—Exercises iii., vii., ix., xi., xii., xv., xvi., xxv., xlii.

To promote digestion:—Exercises xiv., xvii., xix., xx., xxi., xxx., xxxiii., xxxvi., xxxvii.

To establish a natural standing poise:—Exercises i., ii., iii., iv., v., xxiii., xxiv.

To establish a natural sitting poise:—Exercises xiv., xvii., xx., xxvii., xxviii.

To strengthen the leg muscles and ankles:— Exercises iv., v., xxiii., xxix., xxxiii., xxxiii., xxxiv., xxxv., xl.

To overcome round shoulders:—Exercises xvii., xx., xxii., xxx.

To secure good carriage:—Exercises i., iv., v., xiii., xxiii., xxiv., xxv., xxvi.

To relieve insomnia:—Exercises xi., xii., xv., xvi., xxv., xl., xli., xlii.

To make the back flexible:—Exercises x., xxvii., xxviii., xxxvii., xxxvix.

To increase and equalize circulation of the blood:—Exercises vi., xv., xvii., xxi., xxii., xxix., xxxx., xxxxi., xxxvii., xl.

To counteract stooping at the waist:—Exercises xx., xxii., xxx., xxxiii., xxxiv., xxxvii.

To make the waist muscles strong and supple:— Exercises xiv., xxi., xxxvi., xxxvii., xxxix.

To increase power through breathing:—Exercises xvi., xvii., xviii., xix., xx., xxii., xxix., xxx., xxxii., xxxvii.

For rest:—Exercises vii., viii., ix., x., xi., xii., xv., xlii.

TO TEACHERS.

That this book may be more available as a textbook for class use, an outline of lessons is submitted. This outline is given as a *suggestion* only; it is not expected that it will be literally followed. Each teacher will, of course, modify and adapt it to meet the needs of different classes.

All the exercises in the book are included in this outline of twenty lessons, but they could to advantage be extended over a year's teaching. Not until these fundamental exercises are thoroughly mastered—so thoroughly that the results have become incorporated in one's life—is a person ready for advanced or, so-called, artistic physical training.

The minute description of each exercise, and the remarks and cautions regarding it, are specially for the aid and guidance of teachers.

I. LESSON.—STANDING.

Exercises i., iv., iii., xx.

Read Chapter IV. to paragraph beginning "Expression in Attitudes."

II. LESSON.—STANDING, continued.

Review exercises in I. Lesson; in addition, Exercises v., ix., ii., xvii.

Read before next lesson first half of Chapter VI.

III. LESSON.—RESTING.

Review exercises in I. and II. Lessons; in addition, Exercises vi., vii., xiv., xxxix.

Read before next lessons last half of Chapter VI.

IV. LESSON.—Resting, continued.

Review Exercises xvii., xiv., vii., xx.; in addition, Exercises viii., x., xxii., xv.

Read before next lesson Chapter III.

V. LESSON.—GENERAL REVIEW.

Pupils give and explain the different exercises of the preceding lessons.

Illustrate good and bad standing-poise.

Read before next lesson Chapter XI. to Exercise xxvii.

VI. LESSON.—SITTING.

Review Exercises xiv., xxii., ix. Analyze

different ways of sitting, noting how each affects the chest, spine and vital organs. Practice Exercises xxvii., xxxviii., xxi.

Read before next lesson, Chapter VIII.

VII. LESSON.—Breathing.

Review Exercises v., xx., xxi., xv. Discuss different kinds of breathing, the meaning and effect of each. Practice Exercises xvi., xviii., xl.

VIII. LESSON.—Poising.

Review Exercises in I. and VII. Lessons: in addition, Exercises xiii. and xxxiii.

Read before next lesson, Chapter X.

IX. LESSON.—WALKING.

Review Exercises xiii., xxxiii., xxvii., xxvii., xxviii.; in addition, Exercises xxxiii., xxv.

X. LESSON.—GENERAL REVIEW.

Read before next lesson, Chapter XII.

XI. LESSON.—CORPULENCY.

Review Exercises xxiii., xxv., viii., iii. Class lecture on the general effects of exercise, particularly of upward movements of the arms and shoulders. Practice Exercises xix., xxx.

Read before next lesson, Chapter XIII.

XII. LESSON.—Corpulency, continued.

Review Exercises xix., xxx., xxxiii., xxxix., vii.; in addition, Exercises xxxii. and xxxvii.

XIII. LESSON.—Walking, continued.

Review Exercises xxiii., xxiv., xv., xxv.; in addition, Exercises xxvi. and xi.

Read before next lesson. Chapter XI.

XIV. LESSON.—RISING AND SITTING.

Review Exercises xxi., xiv., xxviii.; in addition, Exercises xxix. and xxxiv.

XV. LESSON.—GENERAL REVIEW.

Individual practice; questions by students and by teacher.

Read before next lesson, first half of Chapter XVII.

XVI. LESSON.—Energizing.

Review and classify all the energizing exercises in the preceding lessons; in addition, Exercises xii. and xxxi.

Read last half of Chapter XII. before next lesson.

XVII. LESSON.—NERVOUSNESS.

Discuss psychological and physiological aspects of nervousness. Review Exercises xvii., xvi., xv., xxv., xi., xxxi., xii.; in addition. Exercises xxxvi. and xxxviii.

Read Chapter XV. before next lesson.

XVIII. LESSON:-INSOMNIA.

Discuss Chapter XV. Review Exercises xl., xxvi., xxxi., xi., xii.; in addition, Exercises xli. and xlii.

Read last half of Chapter IV. before next lesson.

XIX. LESSON.—Poising, continued.

Review Exercises iv., v., xxi., xxx., xxxii., xxxiii., xxxiv., xxxvii.; in addition, Exercise xxxv.

XX. LESSON.—GENERAL REVIEW.

Have different pupils present and illustrate the various subjects of the preceding lessons, as standing, walking, resting, corpulency.

"He is the best physician who is the best teacher of gymnastics." —GALEN.

GYMNASTICS OF EXPRESSION.

LESSON TALK.

Progress in physical education, as elsewhere, is impossible if we limit ourselves to respect for traditions, to servile imitation of former things.

—Popular Science Monthly.

THREE different forms of partial culture have characterized three distinct eras in civilization. The education of the Greeks sought physical perfection primarily. The sculptured heroes and gods of that age are to-day recognized as ideals of physical beauty, proportion and expression. In the Dark Ages came the reaction from the body-worshipping Greek age. During this second epoch, the physical man was despised and neglected, and intellectual darkness prevailed while religious asceticism was exalted. With the Reformation came the deification of the intel-

lect, attended by a partial neglect of the spiritual nature and a disregard of the physical.

Each of these ages dwarfed or overdeveloped man in some respect. It is believed that we are now on the threshold of the age of symmetrical culture; a culture that seeks the harmonious use, expression and growth of all the powers. Man is a unit; one in being but three in manifestation, No side of his nature can be neglected without ultimate detriment to the entire man. All branches of education should be related to the *final product* and each branch should complement the others.

Bodily training that produces physical development only is inadequate to the present demands. Self-Expression and Health culture seeks first to emancipate people from the bondage of wrong habits, from the influence of heredity, and from the effects of one-sided education. It teaches the natural use of all parts of the body. Not only does it strengthen and symmetrically develop the entire organism, but it directs the action of the nerve-force and shows how to reserve and to replenish it. This culture recognizes that all move-

ments are primarily from within, outward; that every movement is the manifestation of a thought, of an emotion, or of the unconscious action of some nerve-centre; but it also recognizes that bodily movements, consciously made, react upon the inner directing powers. To obtain a wholesome reactionary effect from the exercises, principles of psychology as well as of physiology are applied to this training.

The question is frequently asked, "Wherein do Americanized Delsarte gymnastics differ from other systems of physical exercise?" They differ materially from all other systems: first, in their ultimate objects; second, in the means of attaining those objects.

The physiological, or functional, effect of exercise is growth, or the reconstruction of the body. Action is excited by the tearing down of the tissues of the body and the pressure for the removal of the debris; thus exercise is forced upon creatures by the facts of decay and repair, which constitute growth. Exercise, in turn, promotes growth by facilitating the preparation and the supply of new materials through the functions of

digestion, assimilation and the circulation of the blood; also by promoting the removal of worn-out material from the system. Gymnastics, in general, have these objects in view and may be called the gymnastics of exercise.

Expression and Health training includes exercises whose objects are not only functional and corrective but also educational. Educationally considered, they may be called the gymnastics of expression. The gymnastics of exercise are, primarily, for physical development and power; the gymnastics of expression have relation to the growth of the mental and the emotive natures, as well as to the growth of the physical. Where the one uses motion exclusively, the other uses motion as related to emotion or to a mental state.

In the gymnastics of expression are included movements that always mean something, that are expressive of certain inner conditions, that by repeated practice will enable the inner faculty or feeling from which they originate, to picture itself forth more clearly, forcibly and easily. Gymnastics of expression cultivate facility in using inner powers, also strengthen and develop

such powers; at the same time, they produce the functional benefits of the higher order of gymnastics of exercise.* Every muscle is brought into healthful action without doing violence to any part of the organism.

Delsarte observed that when man was swayed by the higher emotions, his movements were not of a thrusting, or an angular, or a jerky order, but were harmonious and rhythmical, being principally in the order of curves and spirals; conclusion—if man in his more exalted moments naturally expresses himself by certain kinds of movements and attitudes, the cultivation of similar physical expressions will tend to establish correspondingly worthy inner states. Of course, before the body can take on the expression of any sentiment, as of hope, a corresponding thought must be—consciously or unconsciously—in the

^{*} That Americanized Delsarte gymnastics are not antagonistic to other forms of rational physical training, can be attested by the writer, who directs the Delsarte Department of the School of Physical Education at the Chautauqua Assembly, Chautauqua, New York, where the different trainings are found to complement each other with excellent results.

mind. "The ancestor of every action is a thought," says Emerson. This interdependence of the mind and the body, of the feelings and the outward manifestations—or the Law of Correspondence—is the great principle underlying the harmonious, educational movements of the gymnastics of expression.

Before adult bodies can be molded to the desired expression of high thought and feeling, they must be made plastic, susceptible; an undoing process must in nearly all cases precede an upbuilding one. By mental intensity and muscular restraint, man is restricted, often unconsciously, in all of his movements. This restriction defeats Nature, for she cannot truly express herself through such a high-strung instrument. More, such restriction is a great and an unnecessary expenditure of nerve-force.

To get rid of this injurious tension, or *over-ner-vation*, the freeing, or rest, movements are given. Such exercises should form a part of every course of gymnastics. Invigorating exercises alone are insufficient; to quiet is as essential as to stimulate. By the rest exercises, tense muscles are made passive—the natural state of muscles when

not on "active duty"—and the vital energy that in over-nervation is ruinously squandered, is reserved at the nerve centres, thus re-inforcing overwrought nerves and brain. Delsarte's law for control, "Strength at the centre, freedom at the surface," is here exemplified. These exercises undo bad, wasteful physical habits, and the expression gymnastics develop conservative, healthful ones in their stead. Grace will be a consequent result, for natural movements are established and all nature is graceful.

Relaxing exercises do not, by any means, constitute the chief feature of Self-Expression and Health culture. Specific mention is made of these exercises because they are a distinctive feature, and because their pathological value is but little appreciated even by many who are interested in physical education. The relaxing exercises are only one of several leading characteristics of this culture—a culture every gymnastic of which tends to develop one of the three essential attributes of physical power and of natural expression: namely, poise, or equilibrium; freedom, or elasticity; strength, or control.

Repetition makes habit; ultimately, nerve-conserving movements become automatic, habitual. Then, by the added influence of the psychical upon the physical nature, does self-possession supplant self-consciousness; natural expression supplant artificial repression; suppleness, stiffness; elasticity, supposed old age; buoyancy, languor; gracefulness, awkwardness; self-control, nervousness; repose, restlessness; strength, weakness.

III.

HEALTH AND GRACE.

LESSON TALK.

The first wealth is health.—Emerson.

Whatever one has of gracefulness by nature, is a precious gift from God. Itstands for more than mere personal beauty. It is a token of the life within.

—Sunday School Times.

WHEN twenty or thirty earnest women assemble for their first lesson in what they vaguely term "Delsarte," I always feel inclined—and frequently yield to the inclination—to ask them why they are there, what incentive leads them to make such investment of their time and money. Such inquiry when made brings forth various answers. One says: "I am troubled with insomnia; a friend was cured by these exercises, so I thought I would try them." Another: "I came to learn how to walk and how to mount stairs without exhaustion." Others seek "to

overcome nervousness;" "to get rid of round shoulders," or "a hollow chest," or "one-sidedness;" "to cure headache" or "dyspepsia." Others more broadly say, "to learn how to so conserve my strength that I shall be well and strong." Back of all these answers there is the one general motive; namely, a desire for health. Occasionally, a bright-faced girl says, "I want to be graceful,"—and blushes at her own temerity; or a woman says, "I want to get possession of myself. My body is really an incumbrance, I never know what to do with it."

Rarely, however, are women courageous enough to admit that they wish to discipline their bodies that they may be graceful. Why? Because bodily grace is misunderstood and its value is not appreciated. It is commonly thought to be mere prettiness of movement—a superficial accomplishment—but of no use whatever to practical people. Health is universally desired, but to desire to be graceful seems to many minds a petty ambition. Few appreciate that grace of movement inevitably helps to maintain health, or to regain it if lost. Grace is as useful as it is beautiful.

If we were to teach our children to avoid awk-wardness as solicitously as we try to guard them against the generally accepted causes of illness, we would do more toward making them healthy than our fears and warnings ever will. Self-Expression and Health culture make prominent the utilitarian value of grace. When this value is duly recognized, no man or woman will hesitate to acknowledge that he or she desires to be graceful.

Languid movements and lackadaisical airs do not constitute grace. Grace, rightly understood, denotes strength instead of weakness; it is, as Herbert Spencer says, "Ease in force." This is the refinement of power which no more signifies loss of power than does the refinement of crude iron into steel. In the interview between Richard Cœur de Lion and Saladin, as narrated by Scott, where each performed his greatest feat for the edification of the other, when Saladin with his scimitar dextrously cut in two the gossamer scarf floating in the air, he displayed a power—physical ease and control, or grace—as superior to the brute force shown by Richard when he

severed the iron bar at one stroke of his battle-ax, as was the temper of Saladin's Damascus blade to that of the Briton's unwieldy weapon. Richard manifested effort in force which leads to depletion; Saladin, ease in force, which makes work seem as play.

Hygienically, we cannot afford to disregard grace.

Grace is economy of force; awkwardness is physical extravagance—a waste of force. Grace necessitates a wise adjustment of all parts of the body and a judicious expenditure of the nerveforce. One has said, "Grace shows the strength and vigor and wise use of all of one's powers."

Commercially, we cannot afford to disregard grace.

The awkward person is self-conscious, the graceful person, self-possessed; this difference frequently makes the difference between success and failure in life. Goethe says:

Be thou but self-possessed, Thou hast the art of living.

Speakers, teachers, leaders in any walk in life—and who to-day does not lead or seek to lead in

some profession, some society, some meeting?—should have such easy possession of their instruments of expression that these will instantaneously respond to the thought or the feeling directing them; then, and then only, can the intellectual faculties freely express themselves. Many a thought and many a decisive action that would have profited the world have been lost because of physical self-consciousness. This condition is not the consciousness of the ego, or real self, but consciousness of the organ used by the ego. The self-possessed person forgets the body when using it and thinks only of the object of its use.

Socially, we cannot afford to disregard grace.

"We pass for what we seem." Many persons in the everyday affairs of life, in society, in business, appear stupid who are only timid; they have not possession of their nerve-and-muscle machines.

Why do women feel trepidation when they are to read a paper at a literary society, or to give a five minutes' talk at the "Club"? Because they are conscious of their instruments of expression—conscious of hands, attitudes, voice, even of

dress. Fear is born of this self-consciousness; they dare not do what they are capable of doing. When by self-knowledge and self-discipline, women gain habitual, easy control of their bodies, they will have achieved an important emancipation.

Such physical control gives a sense of repose and power to the mind. The body is but the clothing of the soul; when it moves easily, gracefully—Nature's way—the soul expresses itself with perfect freedom, being unconscious of its physical environment. The inner power can no more achieve its highest expression through a clumsy, restricted body than an able workman can show forth his best mechanical skill with poor tools. Grace is physical freedom, for only free, unconscious movements are ever graceful.

Artistically, we cannot afford to disregard grace. In order to express the highest phases of our being, precision, harmony and ease must characterize our movements; these are the three essentials of grace. Grace is the "dumb music of motion." Awkward movements are jerky and discordant; graceful ones are rhythmical and

harmonious. Beautiful motions delight the eye as beautiful sounds delight the ear. Whatever shows forth beauty has an uplifting influence on mankind.

In all bodily expression there is a close relationship between health and grace; this is clearly evidenced in the poise of the body. The foundation of grace is a correct poise, while an incorrect poise is the primary cause of much illness, especially lung difficulties, dyspepsia and pelvic troubles. Therefore, correct poise, standing or sitting, is the first great essential to be attained in the seeking of health, grace and natural expression.

The mechanical poise of the body is regulated principally by the backbone; when that column is in a correct position, all other parts of the trunk must, of necessity, assume their correct positions. The different parts of the body are so closely allied, organically and sympathetically, that if any one of them is put out of its proper relation to the whole, some or all other parts are sure to suffer. Some delicate organ often pays the penalty of a careless use of a strong member.

"All breaches of the laws of health are physical sins," says Herbert Spencer. Among the chief of such transgressions are bad positions, and an unintelligent use of the backbone.

The backbone of any normal figure describes Hogarth's celebrated line of beauty; namely, the double curve. Commencing at the neck vertebræ, the line of the back curves slightly outward, then inward until it reaches the small of the back, where it again curves outward. This double-curved line is also the line of physical comfort and of health; only when it is maintained are grace and buoyancy of movement possible.

The principle shown forth in regard to the backbone is true in regard to all parts of the body. The relation that contiguous members sustain to each other, largely determines whether or not the movements and attitudes are graceful. Opposition in position or in movement of adjoining members gives ease, equilibrium, naturalness. To illustrate: it is only when the three main divisions of the body—the head, the torso and the legs—are opposed to one another in direction of movement that combined strength and beauty

are seen. No matter what the position of the feet—whether the one bearing the weight of the body be in front, or back, or diagonally in front, or directly at the side, of the free leg—this opposition should be maintained; it is a balanced adjustment of the members. The torso naturally inclines a little from the strong leg—the one that bears the weight of the body—and the head inclines slightly toward that leg. This is the only standing position in which there is no strain, no waste of force. When the body rests against a support, or is turned to one side, or when the arms are brought into action, the opposition becomes more complex. A child at play presents an ever-changing series of complex oppositions.

The inward condition revealed by lines of opposition is that of calm, poised strength; the man is master of himself. Parallel lines of movement reveal a contrary inner state; namely, lack of self-control—the emotion or passion is master of the individual.

It is the lines of opposition that give Greek statuary its repose, beauty and grandeur; we never weary of the strength, the restfulness, the naturalness therein manifested. Self-Expression and Health culture aids in establishing outer harmony and inner poise; thus, we may at least approach these marble ideals in expression.

IV.

HOW WE STAND.

LESSON TALK.

We must guard against the growing into ways that are likely to be disadvantageous to us, as we should guard against the plague.

 $-William\ James\ in\ ``Psychology."$

Let us consider some of the common violations of the natural standing-poise and see wherein they are solicitors of disease. Many persons in their well-intentioned efforts to be straight, rigidly hold their shoulders too far back; to counterbalance this abnormal backward weight, the hips and the abdomen are thrust correspondingly too far forward. Proportion is a simportant a factor of equilibrium in human bodies as it is in marble—sculpture. This "swayback" position is a wasteful one, for muscular tension always involves a sacrifice of nerve-force. It brings a strain upon the

muscles of the lower part of the back which causes them to ache; the vital organs cannot retain the positions and the relations to one another that were purposed in the physical economy; and the center of gravity is then thrown over the heels, causing a jar to the spine and brain with every step. Many a backache and headache are due to this position of the backbone.

The opposite extreme to this rigid position is the stooped one, where the back is one outward hoop or bow from the neck to the base of the spine. Accompanying this position of the backbone will often be found a hollow chest, a "wryneck," and weak waist-muscles that are unable to perform their supporting office. On account of the weakness of these muscles, the heavy upper part of the torso falls or rests upon the lower part. Dyspepsia is prevalent with people of this habit. How can the poor stomach uncomplainingly do its work when it is so cramped and crowded?

Another bad position is that common with schoolgirls, in which the weight of the torso rests

principally on one side of the pelvis. This causes the hip to be unduly prominent and tends to induce internal weaknesses, curvature of the spine, onesidedness and a stooping, lazy carriage.

In some of the following chapters, exercises are given to overcome these injurious, ungraceful habits and to establish healthful, graceful ones in their stead. "Habit is ten times nature." Professor James, in his work on psychology, says: "In the acquisition of a new habit, or the leaving off of an old one, we must take care to launch ourselves with as strong and decided an initiative as possible. * * Never suffer an exception to occur till the new habit is securely rooted in your life. Continuity of training is the great means of making the nervous system act infallibly right."

Expressions in Attitudes.—If the body be free and unrestricted, different inward states picture themselves forth naturally by characteristic outward expressions. An attitude may be the sign either of a physical condition or of a sentiment. The schoolgirl habit of settling on one hip may express a natural shrinking combined with a little

forced aggressiveness, or it may be the result of rapid growth—the body may have developed so fast that it has distanced the child's authority over it.—A seemingly pompous attitude may denote either a superabundance of physical vigor or arrogance of feeling. The stoop-shouldered, hollow-chested attitude may denote physical weakness, or moral weakness—as cowardice, hypocrisy, mock humility—or it may be speak an introspective nature.

When respect or attention is expressed, as by an inferior before a superior, or by a soldier before his commanding officer, the weight is upon both legs, the feet being near together.

When indecision is expressed, as in a suddenly arrested walk where one is in doubt whether to advance or to retreat, the weight is upon both legs, one foot being in advance of the other.

When physical weakness, as in vertigo or intoxication; or moral weakness, as in the case of the braggart, who assumes strong physical attitudes to conceal his moral cowardice, is expressed, the weight is upon both legs, the feet being wide apart to give a firm base. This attitude may also

denote mere physical ease. It is evident that *ease* alone does not constitute grace.

When repose or reflection is expressed, the strong leg, knee straight, is slightly back of the free leg; the knee of the free leg is relaxed.

When despondency or reactionary prostration from excitement is expressed, the strong leg, knee relaxed, is back of the free leg; the knee of the free leg is straight.

When defiance is expressed, the strong leg, knee straight, is back of the free leg; the knee of the free leg is also straight. Many timid, self-conscious people assume a modified form of this attitude, thus expressing a self-assertion they do not feel. Such people are often misjudged; they are considered haughty, arrogant, when in reality their nature is the opposite. Conscious weakness often masquerades behind strong attitudes and expressions.

When active interest is expressed, the strong leg, knee straight, is in front of the free leg; the knee of the free leg is relaxed and only the ball of that foot rests upon the ground. People inclined to melancholy, or those who lack confidence in

their own abilities, should cultivate this attitude; it would have a beneficial reactionary effect. Teachers desiring to hold the interest of a class should themselves show interest by their attitude.

When no marked sentiment or physical condition is expressed, the strong leg, knee straight, is at the side of the free leg; the knee of the free leg is relaxed. This attitude is neutral in expression; neither explosiveness, concentration, physical vigor, nor physical prostration is shown forth. It is an easy, unassuming attitude to maintain in company; it might be called the "society attitude."

When vehemence or strong excitement is expressed, the strong leg, knee bent, is well in front of the free leg; the knee of the free leg is straight and only the toe of that foot touches the ground. This is the arrested run; it is an attitude not frequently seen in everyday life. The "Fighting Gladiator"—commonly so-called—is a good illustration of it.

Instead of the last-named attitude, a "reverential march" or "ceremonious bow" is sometimes given in Delsarte teaching. It is a movement

that naturally follows the neutral, or "society attitude," and consists of describing a half circle-convex to one's self, with the free foot; as this foot crosses the strong foot, the weight is transferred to it. A bow of deference should accompany the movement.

There are many modifications of these nine basic attitudes, but by knowing the significance of these, the expression of all attitudes can be interpreted.

POISE.

EXERCISES FOR PRACTICE.

It is certain, that either wise bearing, or ignorant carriage, is caught as men take diseases, one of another; therefore, let men take heed of their company.

-Shakespeare.

PSYCHO-PHYSICAL culture admits of no purely mechanical exercises. The mind must coöperate with the body. In the exercises for practice, instead of thinking of the physical action merely, keep the thoughts concentrated as much as possible upon some result to be obtained by the practice. Some helpful thoughts to be held with the different exercises have been suggested; these are not, however, in any way arbitrary.

EXERCISE I.

Hold some thought of proportion.

Standing on both feet, the knees straight, the arms relaxed, bend the body slowly forward, inclining the head backward in opposition. Note the movement of the hips; they recede as the torso goes forward. Keeping the hips as nearly stationary as possible, raise the torso to an upright position and push the crown of the head upward.

Repeat several times.

In raising the torso the tendency will be to let it pass the vertical line; this must be prevented, otherwise, the effect of the exercise will be to foster instead of to overcome a bad position. One can easily detect it when the upper torso begins to tip backward, for as soon as it passes the vertical line—where the shoulders are in line with the hips—there will be a perceptible forward movement of the hips.

It is important to appreciate the action of the backbone and the chest in this exercise. The movement for raising the torso begins in the hipPoise. 49

joints and is successively imparted to each vertebra; the natural curves in the backbone assert themselves, the chest is lifted into a position of self-respect, and the waist-muscles resume active duty.

EXERCISE II.

Hold some thought of graciousness.

Assume a careless standing position, the hips being forward, the knees slightly relaxed, the chest sunken and the head weakly inclined forward. Keeping the shoulders perfectly passive, place the hands upon the hip-joints and by a movement of the hip-joints bring the whole body into an attitude to correspond with the thought being held; viz., quiet self-respect, or graciousness.

Although the backbone and the knees act in this exercise, it is not necessary to consider their action, as the best results have been secured when the attention has been directed to the movement of the hip-joints only. This movement consists in rolling the ball that terminates the femur bone

in its pelvic socket. It is essential to be able to make this movement in order to be *sure* of a normal poise. In other exercises that seek this poise, there is a possibility of some error in practice which would cause strain; but if the directions of or this hip-movement are carefully observed, all parts of the body must, of necessity, easily come into their proper positions.

It is not advised to think of the hips or of the action of the hip-joints, except in this exercise and the preceding one, which are for the purpose of securing a correct poise of the body. It is impossible for some to even *put* their bodies into a good position until they have taken such preparatory exercises; but when the necessary muscular facility is acquired, one should forget that one has hips and should think, rather, of expressing noble feelings that are pictured forth by a high chest, a well-poised head, a graceful carriage and a free, unrestricted body.

Although this movement is simple in itself, some patience may be necessary in perfecting it. We are unaccustomed to call a particular part of the body into action and at the same time to com-

Poise. 51

mand all other parts to be passive; our muscleservants are not well trained and often blunder in their work. The shoulders are in the habit of acting whenever an erect position is essayed and, like some nervous, overworked persons, do not know how to rest when they have an opportunity. In this exercise they must be free from tension and not be allowed to make the slightest independent movement. Should it require daily practice for weeks to perfect this movement, it would be time well spent. During years of teaching I have never found any other single exercise so effective in producing a harmonious adjustment of the three main divisions of the body; the final results we seek—health, grace, and natural expression—are impossible without such adjustment.

How can it be known whether one makes the movement correctly or not? By the effects. When it is made correctly, the abdomen recedes, the chest and the entire torso rise, and the double-curved line of beauty appears in the back. Nor can there be any mistaking the pronounced motion of the hip-joints under the hands; when this

motion is felt and the shoulders are kept passive, the effects mentioned will always follow.

No fatigue will result from this exercise unless the back, waist, or abdominal muscles have become weak by disuse; the only remedy for such weakness is exercise. Of course, one should be judicious here, as in eating after a protracted illness—do not overdo the matter at first.

The dress frequently bears witness to the changes that are made in the body by this and the preceding exercise. If it be a snug-fitting garment, as a basque, when the body has assumed a natural position, the dress will be from one to six inches too large over the abdomen, too full across the shoulders, too narrow across the chest, and frequently short-waisted in front and long-waisted in the back.

EXERCISE III.

Hold some thought of unity.

Take the position acquired by Exercise II., the weight being upon both feet. Keeping the knee, hip and shoulder-joints stationary, and moving

Poise. 53

the body as one member from the ankles to the crown of the head, sway slowly forward—not lifting the heels—until the center of gravity is directly over the balls of the feet; then sway backward until it is over the heels.

Repeat many times making the movement more slowly each time.

Always discontinue the exercise with the body in the position obtained by swaying forward. This is the Normal Poise of the body; whenever that term is used herein it will refer to this position. This poise is one of the best illustrations of conservation of energy. It is expressive of physical buoyancy; no light, springing movement can be made when the center of gravity is over the heels. If we habitually keep the center of gravity over the balls of the feet, we would at all times be ready for any movement; also, the abdominal muscles would keep their physical tone much longer than otherwise, even if no special exercises were taken for strengthening them. All our sufferings and sins are due to lack of poise -physical, mental or spiritual.

A sensation as of falling is commonly experienced when one first attempts to keep the center of gravity over the balls of the feet. This is to be expected from the change of position; the upper part of the body really does fall from onehalf an inch to two inches—it falls forward to a straight line. Often in first lessons a student ejaculates: "Oh! I could not stand this way always; I should tip over. It is so unnatural!" The same person after ten days' practice will say, "I stand in the natural pure all the time now, it is the easiest position I every d; besides, I feel so much lighter and younger that when the weight rested heavily upon the heels." Thus what seems unnatural, because unaccustomed soon becomes natural. Habit constitutes second nature and this is often mistaken for first nature. In Self-Expression and Health culture only normal types and conditions are taken as standards. "'To be natural is not to yield to one's peculiarities; it is to get free from all peculiarities."

EXERCISE IV.

Hold some thought of lightness.

Standing in the normal poise, rise slowly on the balls of the feet; then bend at the knees as far as possible, not allowing the body from the hips upward to swerve from a vertical line. From this position, rise on the balls of the feet and repeat the exercise.

To rise on the balls of the feet without swaying, is, by many considered a test of a good standing poise, but it is not an infallible test. Some people can rise from a bad position even to the tiptoes without swaying forward or backward in the least; care should be taken to secure a good poise before beginning the exercise.

The action is confined wholly to the legs. The torso maintains its erect position and is simply carried up and down by the legs. Fear of losing one's balance often causes the torso muscles to become tense and braced ready to assist. The thought of fear must be kept out of the mind by persistently holding the thought of courage, of strength or of equilibrium, and then the reflec-

tion of fear—muscular strain—will not be present in the body.

To rise slowly and steadily is often difficult at first; this may be owing to weak leg muscles, but it is more commonly due to lack of control. By concentrating the thoughts upon control and precision, marked results will be obtained by even a few days' practice; but only after months of practice will perfection of movement be approached. Some may wonder how so simple an exercise can be so long practiced with continued improvement. A nicer direction of the nerveforce will be acquired, the movement will be made with less and less effort until, finally, buoyancy of mind and body will result from its practice.

Great care is required to gain the precision of movement that alone will secure the results desired. A mirror is an impartial critic; if one stands sideways before it when practicing, it will reveal any jerkiness of movement or the slightest deviation of the body from a straight line.

This exercise establishes the center of gravity over the balls of the feet, it develops control, Poise. 57

strengthens the leg and ankle muscles, and gives flexibility to the feet.

EXERCISE V.

Hold the thought of "Repose in action."

Advance one foot, toe touching the ground; transfer the weight to the ball of the advanced foot, raising the heels of both feet as high as possible—the toe of the back foot will lightly rest upon the ground. Slowly come down upon the forward foot, keeping the center of gravity over the ball and then rise again.

Advance the other foot and repeat the exercise. [Always exercise corresponding members or parts of the body equally.]

If this exercise be practiced sufficiently to enable one to hold the poise on the ball of one foot with ease and steadiness, while he reads or repeats a page from a favorite author, it will give an appreciable gain in controlling the nerve-force. These poising exercises are also an important aid in intellectual pursuits. The principal of the McDonald-Ellis School for Young Ladies, Washing-

ton, D. C., writes: "Giving earnest thought to accomplishing these exercises trains the mind so that it more readily grasps any other subject. The Delsarte work in our school has had influence on all other departments. I consider it one of the best means to the best education."

By Exercise V. the dangerous habit girls have of letting the torso settle into one hip, can be overcome, as that exercise develops an easy, natural poise upon either foot without any protrusion of the hip. The admonition "to stand upon both feet" seldom receives more than momentary attention from a child; so the bad habit is continued and deformity is a frequent outcome. A girl should be allowed to stand upon one foot or both feet, but she should be taught to carry her body, and to stand well at all times. "Putting the shoulders back" should not be included in such teaching; these members have in the past received an undue amount of attention. Many have mistakenly believed that if the shoulders were held back a correct, graceful carriage would be insured. On the contrary, focusing the attention on the shoulders gives them a stiff awkwardness, whereas they should be perfectly free to perform their duty as expression agents. Delsarte called the shoulders the thermometers of passion and sensibility. When a person is deeply moved—as by anger, grief, fear, surprise, horror, exaltation, hope, hate or love—the shoulders by their movement measure the degree of the passion.

RELAXATION, RECEPTIVITY, RECU-PERATION.

* LESSON TALK.

We have had something too much of the gospel of work. It is time to preach the gospel of relaxation.

-Herbert Spencer.

OVERWROUGHT, nervous Americans have special need to learn "the gospel of relaxation." From the cradle to the grave, excitation and strained exertion are the order of most lives.

In school, children are urged to injurious nervous efforts in their studies that a high per cent. may be attained. Undue stimulation of a growing child's brain is at the expense of the entire nervous system. Plants forced to premature flowering are weakened by the process and often bloom themselves to death. After school come

the drive and the strife of the competitive systems of society and business; the nerves are kept constantly alert in the struggle for wealth, for position, or, many times, for the necessities of life. Thus "the pace that kills" has become common with modern men and women.

To get at causes, let us ask why do work, worry, hurry, break men down? Physical labor alone cannot be the cause, else professional men would be exempt; intellectual pursuits alone cannot be the cause, else miners, locomotive engineers and farmers' wives would be exempt; combined physical and intellectual labor in themselves cannot be the cause, else society women, who devote themselves to pleasure exclusively, would be exempt. Whereas, victims of "the pace that kills" are frequent in all these classes.

It matters not what the occupation, the habits, the condition, the environment, of the individual, the immediate cause back of collapse—physical or mental—is the same. It is lack of nerve-force. This shortage is caused by extravagant use and insufficient replenishment of the supply; but these are secondary causes and are due, in turn, to a

primary cause; namely, tension, or over-nervation.

Tension equals fatigue, tension equals irritability, tension equals self-consciousness, tension equals nervousness, tension equals insomnia; to these abnormal conditions are attributable nearly all "the ills that flesh is heir to."

In the action of any part of the organism there must be some amount of nerve-force used and, literally, the use of nerve-force always implies some degree of tension; but, as the word is used in these lessons, tension signifies the use of an *unnecessary* amount of nerve-force, or, as scientists would say, over-nervation. To illustrate: If in holding a pen or lifting a weight, more force is exerted than is required, that is tension; if in walking or in stooping, more force is sent to the members exercised than is essential to make the movement, that is tension; if when seated the arms are held near the body, or the fingers are tightly locked, that is tension.

In physical economy as elsewhere, "A penny saved is twopence gained," yet how much nerveforce is frittered away on little, purposeless movements; as, in tapping the feet, hitching the shoulders, jerking the head, drumming the fingers, clasping and unclasping the hands, working the lips, grating the teeth, contracting or elevating the eyebrows. Tension is a chronic state with many; the nerves are wastefully wrought upon not only when the muscles are in action but when they are not. People sitting in easy-chairs often look, and are, uneasy—every muscle being held in severe rigidity. Keeping nerve-force in the muscles when there is no legitimate use for it, is like keeping up steam in a locomotive days before it is to be run.

Tension is as unnatural as it is wasteful. A little child lets its arms, hands, legs, fall passive, relaxed, when they are not in use; we hold them. Nature is economical, but man is a prodigal spend-thrift of that which is "more precious than great riches"—his nerve-force. What exhaustion follows a few hours in a dentist's chair when one has been holding to the arms of the chair with might and main, bracing with the feet and fatiguingly straining with every nerve, as if that were the only way in which the pain could be endured. The pain is not lessened by this resistance, the

exhaustion is augmented; indeed, the latter is chiefly due not to the pain but to the useless expenditure of nerve-force.

Much manual labor that otherwise would be beneficial exercise becomes injurious because of the way in which it is done. Being uneducated in physical economy, people make hard work of that which is not so, and thus, body and brain are needlessly exhausted. Some study with the whole body. A certain literary man always felt in his knees the fatigue of writing, and when he walked any distance his arms ached because of the tension in them; nervous prostration was the inevitable result that followed years of such wasteful expenditure of the nerve-force.

Balance between the receipt and the expenditure of vital force, constitutes perfect health. We have seen how tension unduly increases the expenditure; not less does it decrease the amount of vital force received. Tension is a two-edged sword, cutting off life at both sides.

Life is not manufactured within the body, The so-called vital organs, that by some are held to be the manufacturers of vital force, are no more so than the engine is the manufacturer of the steam that drives it; both body and engine are merely machines through which the impelling force acts.

Vital force is inexhaustible and everywhere present; replenishment of it is ever available to man, provided he establishes within himself the conditions favorable to its reception. When the mind and the body act without tension, this force repairs the legitimate waste that attends activity, mental or physical, and preserves the equilibrium between supply and consumption. Tension is an obstruction to the entrance of this force; it antagonizes nature's endeavors for replenishment. Assuredly, it is of the first importance to rid ourselves of this foe to health—even to life itself. How is this to be accomplished? By relaxation.

Relaxation puts the organism in the state of receptivity; then recuperation follows.

Relaxation is more than diversion, more than an occasional holiday, an evening of pleasure, a summer's outing. Relaxation means the release of the organs and the tissues from tension; it means a husbanding of nerve-force; it means the habitual, muscular repose of any part, or of the whole, of the body when it is not in action for some definite purpose; it means a letting go of one's self at will. This is the only remedy for exhaustion; when relaxation is secured, nature takes care of restoration. Through tension the nerve-centres are depleted; through relaxation they are recharged with force.

If in the many instances of physical bankruptcy known to them, people would trace the dire effects back to their causes, we would not so often hear the apology for sinful trespass upon the mental and physical powers, "Oh, I haven't time to rest, I've so much to do!" So much to do! Why, then, cut off years from the time in which to do that much: why impair the instrument with which to do it: why unfit the workman for his best work at the present hour? It is when work crowds that we worry, and then we do our poorest work. A thought may consume more nerve-force than a blow. Muscular motion is cheap; nerve power is expensive. Hurry and worry are physical sins. When we feel most hurried or worried is just the time to do nothing—to relax.

The tension that is manifested in the exterior muscles of the body does not by any means constitute the entire effect of combined thought and will on the organism. Wherever nerves are, there may be tension, for the nerves are the conductors carrying vibrations to and from the centers of volition. As there is conscious and unconscious thought, so there is, there must be, conscious and unconscious tension; tension that affects the involuntary as well as the voluntary functions of the body.

It is a possible, although not a usual, condition to have the exterior muscles completely relaxed while the thoughts run riot; all tension consequent on this state is in the tissues and organs that perform the involuntary functions. Such tension interferes with the natural operations of the internal organism. Physicians recognize that the act of digestion is stayed by fright—a mental condition that causes unconscious tension in the digestive organs. The effects of emotion upon the heart are well-known phenomena of unconscious tension. Dr. James H. Jackson, of the Dansville (N. Y.) Sanatorium, says, "People in

this country have more dyspepsia in their brains than in their stomachs."

There is always a mental cause for tension, whether the tension be manifested upon the voluntary or involuntary processes of the body. Fortunately, these two processes are intimately connected, so that through the voluntary we can reach and regulate the involuntary. By controlling the conscious thoughts, we affect the unconscious ones, and so gradually establish harmony in the entire man.

Some of the most advanced scientists now hold that mind is the only force. Every quality of thought sends a corresponding quality of vibration over the nerves, which, in turn, register a healthful or injurious effect upon the body. Thoughts make or unmake us physically as well as mentally, not because of the thoughts in themselves, but because of their physiological effects on the body. Dr. Leibig, the distinguished chemist, says, "Every conception, every mental affection, is followed by change in the chemical nature of the secreted fluids; and every thought, every sensation, is accompanied by a change

in the composition of the substance of the brain."

Thoughts of contention, of impatience, of anger, work to our physical as well as to our moral detriment. They put tension into the body, and tension obstructs some vital process Most of all, we should not entertain thoughts of fear. There is more to fear from the action of fear on the body than from any other cause. All happy thoughts—thoughts of hope, beauty, sublimity, love, faith, charity—are upbuilding; they are relaxing in effect, and thus they provide access for the vital energy.

Relaxation can be secured by mental and physical discipline. The will can be made a governor-valve for shutting off, as well as for putting on, steam in the human machine. When the tension can be removed at will and the muscles be reduced to their natural, free condition, physical regeneration is well begun. Then, do we "become as little children," and like them, we shall be recuperated from all "wear and tear" in the degree that we relax and are receptive to vital energy.)

VII.

HOW TO REST.

EXERCISES FOR PRACTICE.

Let us pause and catch our breath
On the hither side of death;
Lose all troubles, gain release,
Languor and exceeding peace,
—James Whitcomb Riley.

SELF-EXPRESSION and Health culture teaches as well as preaches the "gospel of relaxation;" relaxation is essential before rest is possible. Things apparently simple are sometimes the most difficult to compass. Complete relaxation is simply, doing nothing, but this is so difficult that many are prone to believe that it is impossible. There are persons who at the words, "let go," can entirely relax, but such instances are exceptions; generally, when told to relax, a person will say, "How can I relax?" "By with-

drawing the nerve-force from the arms, the hands, the head, or whatever part you wish to surrender." "But I do not know how to do this; nerve-force is such an intangible substance, I cannot control it." Steam, electricity, thoughts are intangible, but not uncontrollable; neither is nerve-force.

EXERCISE VI.

During all of the relaxing exercises, hold some thought of freedom, rest, or tranquility.

Arms hanging at the sides, inhale and forcibly agitate the hands until they feel heavy and lifeless. Shake them forward and backward, laterally, and in circles from each other and toward each other.

In all exercises of the arms, the motor power should be at the shoulder.

The hands being the direct agents of the mind, by their tension and restlessness unmistakably report mental strain and agitation. They are sometimes the most difficult members to make reposeful, but by continued practice of this simple exercise everyone can gain the power of withdrawing the nerve-force from them at will.

EXERCISE VII.

The hands being passive and the elbows straight, raise the arms above the head. Hold the position while mentally repeating several times, "relaxation, rest, repose," then instantaneously relax the arms.

This exercise can be taken standing or sitting, but sitting is at first the better position as the lower limbs can then sympathize with the relaxation of the upper.

The arms must not be put or thrown down, but allowed to drop, thus obeying the law of gravitation. When thoroughly relaxed they fall like sand-bag arms, the shoulders, elbows, wrists and finger-joints being perfectly free; if they are thrown down, there will be restriction at the elbows, or the upper arms will be brought close to the body; if they are put down, they will descend gently, making no noise as they touch the body. It may be helpful to imagine that a

severe blow is struck upon the shoulders, for the moment paralyzing the arms and causing them to fall by their own weight. A relaxed member always seems heavy.

EXERCISE VIII.

Arms hanging passively at the sides, energize the upper arms only and lift them directly outward until the elbows are in line with the shoulders; the relaxed forearms will hang vertically from the elbows. (Agitate the upper arms to prove the relaxation of the forearms.) Successively, lift the upper arms as high as possible, energize the forearms and raise them until they are in line with the upper arms, energize the hands, the fingers, and stretch vigorously upward. Hold this position while repeating, as in the preceding exercise, "relaxation, rest, repose," then, successively, relax the fingers, hands, forearms and arms.

This exercise develops a directing control of the nerve-force; we send it to a certain part of one

member and there arrest it, or we withdraw it from any given place at will.

By the practice of these relaxing exercises, the arms become habituated to repose; this is a physical gain, for all nerve-force consumed in useless action or in repression of action, is wasted. Beauty of expression in the arms is also acquired by this means. When the raised arms fall relaxed, they assume easy positions and graceful lines. It is tension in them that makes angles or awkwardness possible. See the freedom and grace in little children's movements and positions before they become conscious of their bodies.

EXERCISE IX.

Standing or sitting in the normal poise with the arms hanging passive, inhale as in Exercise XVI., and raise the shoulders as high as possible. Hold the position a moment; then relax the shoulders, after which slowly exhale.

Care should be taken to keep the chest up when the breath is exhaled. It is essential to distinguish between elevating the chest and protruding it; the latter requires an effort and gives a strained appearance to the figure.

This exercise frees the shoulders from restriction and gives them a natural—not a military—position. It also removes over-nervation from the muscles of the back.

EXERCISE X.

Standing in the normal poise, slowly relax the spine, vertebra after vertebra, beginning with the neck and end by bending forward from the hips. (The head will hang pendant, the torso drag heavily forward, and the arms dangle from the shoulders.) Gently bend the relaxed mass to the left side, then to the right; bring it again directly forward and very slowly energize and raise it. The lower portion of the back first becomes active; the energy gradually progresses upward until, last of all, the head regains its normal position.

When one unreservedly yields one's self, the trunk will drop as if the muscles had not the power to sustain it. If there be pain in any of the muscles of the trunk, this exercise will tend to remove it; a general soothing effect will result, as the great spinal cord and many of its offshoots are directly affected; and flexibility in the back will be promoted.

EXERCISE XI.

The head being in its normal position, look fixedly at a given place in the ceiling and take three deep respirations; after exhaling the third time, let the eyelids wearily droop and the lower jaw relax and fall.

If the eyelids and the jaw—the jaw is a direct agent of the will—are relaxed, not simply put in the desired positions, the effect on the feelings will be conclusive evidence of the correspondence between outer manifestations and inner states. The outer expression here is a most inane one, while stupid well describes the inner state. As a nation we are too "smart," too alert; it is healthful to cultivate spells of self-imposed stupidity.

Keeping the tongue flat in the mouth and monotonously repeating, "bah, bah, bah," as a baby does, will aid in relaxing the jaw and all of the muscles of the face.

In persons of weak will, the lower jaw is often unintentionally relaxed; in imbeciles, it is habitually relaxed. In persons of hard, cruel natures, or of positive convictions, the jaw is firmly set. In poets, artists, lovers, combined strength and tenderness are revealed in the gently closed lips and jaws.

If the eyelids are perfectly relaxed, there will not be the slightest tremor in them. Nervous people, brain-workers, and people "sight-seeing" would become much less fatigued if they would occasionally relax the eyelids for a minute or two; overstraining the optic nerve affects the entire nervous system injuriously. Moreover, seeing or listening under a physical strain diminishes one's power of perception and of retention.

EXERCISE XII.

Sitting with the back supported, relax the eyelids as in Exercise XI., then gently lower the head until the chin rests upon the chest. Slowly roll

the head toward one shoulder using no more energy than is necessary; continue the rolling movement, allowing the jaw to relax as the head circles back. At the middle point of the circle, the head rests against the spine, the mouth is open, and all of the muscles of the face are relaxed. Continue the circle to the other shoulder and then relinquish all guidance of the movement; the head will roll forward and around by its own weight, and the momentum thus acquired will cause it to oscillate to and fro in decreasing arcs until it ceases to move.

Repeat at least three times in succession.

Holding the head by muscular tension as many people unconsciously do, makes it a difficult member to relax and gives a person an ungracious expression. When the neck muscles are tense, the movements of the head are jerky; such movements are expressive of impetuous weakness. Thus the outer seeming oftentimes libels the inner being, for many strong, but repressed, characters have this mannerism. Emphasizing with the head indicates lack of self-control. "In his weak

violence he shook his empty head." Strength and control are shown forth by a firmly poised head that easily sways, turns and bends to secure the equilibrium of the body, or moves to correspond with the feeling to be expressed, but is too dignified to bob or jerk.

This exercise is very soothing in its effects; in class practice it seldom fails to produce a feeling of drowsiness in the majority of those present.

EXERCISE XIII.

Standing with the weight on the right foot, lift the left upper leg until the knee is in line with the hip, the fore leg being bent as far back as possible. Relax the fore leg letting it swing from the knee like a pendulum; then relax the upper leg which will make the foot fall heavily to the ground.

This exercise is good practice for maintaining the equilibrium of the body as well as for gaining control of the nerve-force.

EXERCISE XIV.

Standing with the weight on the right foot, relax the head toward the right side, then the shoulders, then the trunk in the same direction, letting the arms drag heavily from the shoulders. Reversing the order, energize the lower trunk, the shoulders and the head. Relax as before, then rotate the dead-heavy mass to the other side, also changing the weight to the left foot. Return to normal poise.

In addition to the relaxation that this exercise gives, it draws the blood to the abdominal region thus stimulating the action of the internal organs; it also develops freedom of movement in the waist zone which makes possible the undulatory motion so often written of—so seldom seen.

EXERCISE XV.

Sitting easily with the back supported, take a long, full breath through the wide open mouth and, at the same time, gradually energize the whole body, stretching the arms above the head, the

legs and the feet outward in front. The result of this exercise should be a yawn.

Repeat, until the yawn becomes involuntary.

A good, stretching yawn—not one that is half smothered behind the hand or a handkerchief, but one that is allowed free expression—gently invigorates every part of the body with a wave-like flow of energy which is followed by a moment of general passivity. Such moments are recuperative. It may not be polite to yawn, but it is natural. Animals stretch and yawn. It is healthful to yawn and stretch one's self thoroughly awake before rising; it is equally beneficial to yawn and stretch when fatigued. The yawn is the body's natural cry for reinforcement, and in that cry itself comes a partial answer to the demand; for every time that a part or the whole of the body is relaxed, even for a moment, some amount of vital energy is received. Yawning is helpful in overcoming nervousness and insomnia. Yawning and laughter are natural—albeit involuntary—gymnastics.

Emerson speaks of the "rest and refreshment

that come of shaking one's sides with laughter." Why does laughter bring rest and refreshment? Because through its salutary influence upon the mind and its effect upon the physical organism, it removes the tension that always prevents reinforcement. Carlyle satirically says, "Few women are able to laugh what can be called laughing, but only sniff and titter from the throat outward." Such laughter will not afford the relaxation that refreshes. The diaphragm should actively play in a wholesome laugh; then it may be said of laughter as Burke said of beauty, namely: "It acts by relaxing the solids of the whole system."

Laughter has been known to dispel insanity.

VIII. THE BREATH OF LIFE.

LESSON TALK.

 $\begin{tabular}{ll} \begin{tabular}{ll} He \ lives \ most \ life \ who ever \ breathes \ most \ air. \\ Elizabeth \ Barrett \ Browning. \\ \end{tabular}$

THAT it is important to breathe pure air is to-day quite generally recognized; but that bodily strength, mental activity and spiritual tone depend in a marked degree upon the manner of breathing, is not so well understood. Insufficient clothing, though of good quality, will not keep a man warm; neither will insufficient air, though of good quality, thoroughly purify the blood, normally accelerate the action of the thoracic and the abdominal organs and duly strengthen the respiratory muscles.

We "die for want of breath" and we only live in full measure, physically, mentally, morally, when there is no deficiency of breath in quantity or quality. Unless the physical system is momentarily invigorated by plenty of pure air, properly breathed, the body, brain and nervous system are imperfectly nourished. When the organism is thus depleted, the spiritual perception is also impaired. The Greeks believed that the soul is cleansed by full, deep inspirations, as the body is cleansed by bathing. Science proves that the material body is purified by breathing, poisonous gas and effete tissue being thus expelled from it.

Air is an indispensable condition of life. Man can live for weeks without food, as numerous fasters have proved; people have survived several days without water or other liquids; but man can live only a few minutes without the vital sustenance afforded by air. Nor is there any limit to the amount of air that it is wholesome to take. Civilized man is intemperate in eating, drinking, working, talking, reading, thinking, feeling—in everything in fact, save breathing; there is no such transgression as respiratory intemperance. Who ever heard of a man's overbreathing?

Clothing that interferes with the action of the diaphragm and that does not allow the floating ribs to float, is one of the chief causes of the short, spasmodic breath from the upper lobes of the lungs; this breath is almost universal with women whose dresses are "just a little snug" or a "close fit." Because of the pressure of the muscles, and of the resistance of the clothing thereto, in diaphragmatic breathing, it is more comfortable to breathe in such a manner as to avoid this constant antagonism between the body and clothing; thus clavicular breathing unconsciously becomes the habit.

Not only external restriction, but restriction in the body itself—tension—seriously interferes with healthful breathing; if we could take all volition out of the act of breathing; if we could, as it were, abandon our instrument and let it become receptive to the inflowing breath, respiration would be natural. Tension and its bad effects are what interfere with the harmonious action of all automatic functions. Were it not for these we should have no more responsibility in regard to the manner of our breathing, than has a kitten in regard to its breathing. As it is, we should strive to counteract the bad influence of our unnatural environment and habits.

86

Action is the law of health; all the vital organs are quickened by breathing more than by any other single operation. By deep, unimpeded respiration, not only the organs of the thoracic cavity, but the stomach, liver and all other organs that are in juxtaposition to the muscles of respiration, are stimulated. Indigestion causes the muscles of the stomach gradually to shrink, thus, ultimately, to become incapable of contracting and dilating; this condition can be prevented and remedied by exercise. Feeding these muscles is insufficient in such cases, for food cannot compel them to act; exercise can. Localized exercise, as deep breathing, sends more blood and nerve force to the muscles of the stomach which reanimate and strengthen them. Before it is possible to tone up the vital organs by invigorating, deep breathing, the cause that produced the habit of bad breathing must be removed. Generally, this cause is an incorrect poise of the body, standing or sitting; or muscular tension; or compression by the clothing; or weak abdominal muscles. A corpulent man often breathes as weakly and insufficiently as a tightly-corseted woman. Learning to stand well, to strengthen the abdominal walls and to relax the tension of the muscles, is an essential preparation for gaining health by breathing.

Correct breathing is an effective medicine for pulmonary troubles. Headache, lassitude, nausea, colds, can frequently be breathed away. After an hour or so in a crowded church, lecture room or theatre, who has not thrown off the symptoms of incipient blood poisoning by deep inhalations of fresh air?

Dr. Lennox Browne says in relation to breathing, "Exercise in moderation, regularly and conscientiously repeated, will increase the breathing capacity, improve the voice, and make speaking easy. It may change, and has changed, the falsetto of a grown man into a full, sonorous, man's voice; it may restore, and has restored, a lost voice; as it also may cure, and often has cured, clergyman's sore throat. It will certainly turn a greater quantity of dark blue blood into bright red blood; the appetite will increase; sounder sleep will be enjoyed; flesh will be gained; and the flabby, pallid skin will fill out and get a healthy, rosy color. All this, and more, may be,

and often has been, the result of lung-gymnastics carried on in moderation and with perseverance."

Rapid, insufficient breaths betoken weakness. Slow, deep breathing is the habit of animals noted for their strength and longevity; the elephant breathes only about ten times a minute, while some of the small, weak animals take over one hundred breaths in the same time. The breathing of an infant is rapid, but as the child grows in strength, the number of respirations lessens until the average of about eighteen a minute is reached.

Most adults breathe too often but do not breathe enough. The hurry and the anxieties of our intense life thus manifest themselves. Because of the intimate relation existing between respiration and the inner conditions, it is important that conscious attention be given to breathing until the unconscious habit of deep, restful breathing has been established.

Varied mental states are revealed by different kinds of breath. Agitation and nervousness are exhibited by a short, quick breath; great excitement by a gasping, irregular breath; melancholy by a slow, uncertain breath; concentration, as in

listening intently, by a held breath; a calm, happy state of mind, by an even, deep breath.

"Right thinking and right breathing are the two things most essential to health and happiness," said an eminent physician. It is evident that right thinking induces the right breath; likewise, right breathing will tend to right thinking, and may become a promoter of health and happiness. There was wisdom in the remark of a young lady who, after closing the door upon a restless, garrulous caller, turned to her friends and said, "That woman has set me nearly frantic. I must go and breathe a while to calm myself." Many a nervous person could become mentally poised by reposeful breathing.

There is a close analogy between the breath and the spirit; in fact, one may almost declare that the breath is the symbol of the spirit. "And the Lord God breathed into his nostrils the breath of life and man became a living soul." It is significant that the Latin root (spiritus) from which are derived all the words applied to the process of breathing, also means spirit. The expression of spiritual qualities expands our natures; breathing

expands us physically. The Orientals gave spiritual meaning to the acts of respiration. Inspiration was interpreted, "God in us;" expiration, "We are in God."

IX. RESPIRATION.

EXERCISES FOR PRACTICE.

Self-culture aims at perfection and is the highest fulfilment of the law of God. It means perfect symmetrical development of all our powers of body, mind and spirit.

—Goethe.

H OW we shall breathe is a much disputed subject among teachers, speakers and singers. Some advise intercostal breathing, others declare that abdominal breathing is the only natural respiration, while others call this latter "abominable" breathing, and endorse chest breathing or diaphragmatic breathing. It would seem that there need not be such diversity of opinion about a natural function whose modus operandi is so easily discerned as is that of breathing. Observation of healthy, unrestricted children should enable one to decide what mode of breathing is natural under normal conditions, and science should aid in determining what special

modes of breathing are promotive of special results. The principal action in a child's breathing is not in the upper part, but in the middle and the lower parts of the torso. The diaphragm, the great muscle that separates the lungs from the abdominal viscera, gives the muscular support and control of the breath; the office of the intercostal and the abdominal muscles is secondary to that of the diaphragm. The abdominal muscles, because of their external position, are sometimes thought to have the principal office and movement in respiration; in truth, their office is subordinate to that of the diaphragm, but their movement is more easily discernible than that of the chief muscle of respiration. In every normal breath of child or man, these muscles rhythmically rise and fall, measuring the respiration as the heart-beats measure the circulation. This is the normal breath of man and animals. Under certain abnormal conditions there is no action whatever in the abdominal muscles.

EXERCISE XVI.

Hold some thought of repose.

Lying prone upon the back, place one hand upon the chest, the other upon the abdomen forward of the hip-joints; slowly and audibly exhale the breath, then close the lips and let the air flow into the lungs through the nostrils. Keep the chest quiet during the exhalation and the inhalation.

When control of the chest is obtained with the body in a recumbent position, take the same kind of a breath in a sitting, and then in a standing posture.

If the respiratory exercises begin with exhalation instead of inhalation, good results will be realized in less time than otherwise would be required. Persons undisciplined in respiratory exercises commonly make much useless effort when they try to inhale deeply; they lift the shoulders and the chest and contract the abdominal muscles. Such physical exertion obviously makes a deep breath an impossibility. The habit of gasping inhalation of some singers and speakers is frequently caused by this muscular officiousness in inhalation

If the chest is not allowed to move, the diaphragm and the abdominal muscles will, of neces-

sity, be active. As the lungs expand in inspiration, they press the diaphragm downward; it, in turn, causes the sides to swell outward and the abdominal walls to extend, somewhat. This motion will be felt under the hand that is forward of the hipjoint in this exercise. In exhalation the movement is reversed; as the air leaves the lungs, the diaphragm resumes its dome-like shape, the abdominal walls retract and move inward and upward.

Many persons find that at first they have no control over the different muscles; that the chest will move, that the abdominal muscles are disinclined to action, and that the movement of the diaphragm is uncertain. But by patient practice and by *concentration* of thought, control over all these can be acquired. When the chest can easily be held stationary, the vigilant watch over it may cease, for the right habit of breathing will then have been commenced, and Nature always assists in reëstablishing natural states and action, if we only give her a chance. In normal inspiration, the chest swells slightly, the back expands somewhat, while the sides expand considerably.

This breathing-exercise has a quieting effect on the nervous system, especially when the breathing is slower and fuller than is normal and the mind is concentrated on some abstract thought, as "Life, Light, Love."

EXERCISE XVII.

Hold some thought of animation.

Stand with the weight well over the balls of the feet, the torso tipped slightly forward, the head backward; rotate and raise the arms to the level of the shoulders, palms upward, at the same time inhale a deep, full breath. Keeping the elbows in line with the shoulders, bend the forearms inward rise on the balls of the feet, and lightly but firmly tap the surface of the chest with the fingertips. After a moment's percussion, slowly exhale and let the heels sink to the ground.

Repeat several times.

Care should be taken to keep the elbows well raised during the percussion, as by so doing the whole torso becomes responsively active; also the whole surface of the chest, particularly that portion near the arms, should be tapped.

This exercise stimulates the chest muscles, quickens the circulation and tends to increase the lung-capacity.

EXERCISE XVIII.

Hold some thought of expansion.

Standing or sitting erect, exhale and inhale as in Exercise XVI.; then, retaining the breath, slightly but firmly contract the abdominal muscles. Hold the sides of the body firm, and count ten or more as the breath is slowly exhaled.

This is an important breath and it will be used in many of the following exercises; it expands the emotive zone of the torso, and makes the vital zone firm and strong, but not prominent. It is the breath that supports good tones—pure, resonant tones that suggest vitality and controlled strength.

A person instinctively takes a deep, full breath and *holds* it when he wishes to exert unusual strength, as in pushing, pulling or lifting. Delsarte taught that pauses and poses are the most effective things in the language of words and gestures, both indicating reserve force.

EXERCISE XIX.

Hold some thought of power.

After exhaling, inhale as deep a breath as possible, expanding the back, the sides and the abdominal walls; then, retaining the breath, by a muscular effort forcibly contract the abdominal walls. Hold the breath until its retention requires a strained effort; during exhalation be careful that the chest does not collapse.

No muscles in the body have more important service to render than have the abdominal muscles in respiration and in holding the abdominal and pelvic viscera in place; they can be made firm and strong by this exercise.

As these muscles forcibly contract, the diaphragm rises and the air in the lower cells of the lungs is impelled upward to their apexes; this expands that portion of the lung tissue that is least active during normal inspiration. The apexes are

the parts that are affected first in pulmonary consumption.

This breathing-exercise is also an effective means for filling out the hollows in the neck. If done correctly—with no tension in the neck—as the abdominal muscles contract the hollows will be filled out; by persistent practice they will gradually disappear.

EXERCISE XX.

Hold some thought of exhilaration.

Sitting erect, place the open hands at the waistline just above the hips, the fingers front, the thumbs back; pressing the hands against the body, bring the elbows well forward being careful not to let the chest sink. Slowly inhaling, steadily move the arms backward as far as possible and bend the torso somewhat forward; the movement of the shoulders and the arms will pull the fingers from the body but the thumbs serve as a fulcrum and must not be allowed to move. Hold the position as long as the breath can easily be retained; then gently relax the shoulders and slowly exhale, keeping the chest raised. Place the hands a little higher at the sides and repeat the exercise. Then higher still and repeat. Lastly, take hold of each arm with its own hand by placing the open hand directly in the armpit, and repeat the exercise.

Take the movement at least twice in each position.

This exercise strengthens all of the muscles of the torso, especially the abdominal and the waist-muscles. It is excellent for expanding the chest and the lungs. "Developing the chest" too often refers only to the enlargement of the external muscles while little or no attention is paid to the more important internal organs, the lungs. Some broad-chested athletes are deficient in breathing power and are as subject to lung affections as are men who appear to be their inferiors, physically. Chest development, like all true growth, should be primarily from within. The foregoing exercise strengthens the lungs and the external muscles at the same time.

Round shoulders can be overcome by this exercise. The backward movement of the arms flattens

the shoulders; by the elevation and the expansion of the chest, the length of the waist is increased in front and decreased in the back, if there has been an inclination to stoop. Torso muscles, made strong by being compelled to perform their legitimate work, are the only natural shoulder-braces.

EXERCISE XXI.

Hold some thought of symmetry.

Advance one foot and stand with the weight on it. Inhale and, retaining the breath, rapidly swing the arms forward, up and backward in large circles, making these as nearly perfect and parallel to each other as possible. Make from five to ten rotations, then discontinue the movement and exhale.

Repeat several times with each foot advanced alternately.

Care should be taken not to bend the torso, nor crane the neck in this exercise; the chest should be high and the head well poised.

This exercise strengthens the torso muscles,

especially developing those directly under and in front of the arms where ugly hollows often are.

EXERCISE XXII.

Hold some thought of vitality.

Rise on the balls of the feet, extend the arms at the sides level with the shoulders, palms upward; firmly close the hands, inhale, and stretching the arms to the greatest extent possible, vigorously rotate arms from the shoulders backward in very small circles. Increase inhalation during the rotation. Exhale slowly, sink arms to sides and come down on the whole of the feet.

Repeat until the entire body is in a glow.

Care should be taken to keep the body poised in front, rather than back, of the vertical line; also, to keep the head well up, not allowing it to incline downward or forward. Unless the arms are kept level with the shoulders, much of the beneficial effect of the exercise will be lost.

This exercise is an adaptation of the West Point "shoulder-shaving" exercise. By it, the chest

and shoulder muscles are strengthened, and the lungs are expanded. The shoulder-blades should nearly touch, or shave, each other during the rotation of the arms.

This is a good exercise for daily practice for any who are hollow-chested, round-shouldered, or whose lungs are weak. It stimulates the digestive functions and strengthens the abdominal walls.

Many persons complain that breathing-exercises cause dizziness; this only shows the greater need of the exercises. The strength of a chain is rated by its weakest link, not by its strongest; so with the strength of the body. When the breath by its effect upon the circulation causes dizziness, the "weak link" that should be fortified is revealed.

Retention of the breath is an important part of respiratory exercises, but in no case should the breath be held quite as long as it is possible to hold it, because the reaction from such extreme exertion is physical fatigue that neutralizes the benefits of the exercise. Always exhale while it can be done slowly and the active position of the chest can be maintained. This suggests reserved force; the explosive exhalation suggests exhausted force.

X. WALKING.

EXERCISES FOR PRACTICE.

To walk badly is sinful, for bad walking is injurious to the physical organs. To walk badly is bad manners, for every way of walking expresses something. Bad walking expresses bad things and is therefore impolite, just as slang and violent gestures are impolite.

-The Countryside.

H OW we do walk, and how we should walk, are oftentimes the opposites of each other. It is one thing to get from a certain place to some other by means of the human locomotive apparatus; it is quite another thing to walk miles with an invigorating, elastic step and as a result to feel vitally quickened rather than fatigued. Walking should not be under the conscious direction of the brain; it should be an automatic movement. Habit is the great economy of nature; if the brain were required to take cognizance and control of all movements, it would break down

quickly. The brain is relieved in proportion as the outlying ganglia do their rightful work.

Walking in the open air is generally regarded as beneficial exercise; it undoubtedly is such, when one knows how to walk. But when the mind is conscious of an effort, when the body is dragged wearily along, or when the nervous system is made to pay the penalty of vicious thuds of the heels, it is questionable if the injurious effects do not more than counterbalance the benefits derived from the muscular activity and the fresh air.

Many persons willingly spend time and money in learning to dance who would ridicule the idea of learning to walk with economy of force, and grace of bearing. Yet dancing is only an incidental, an occasional physical pleasure, while walking is a daily physical necessity; few dance, everybody walks. Nor does dancing *per se* produce a dignified carriage or a natural walk; many dance gracefully who walk awkwardly.

One has said, "The art of walking should be taught to girls as carefully as the art of reading, for one is the basis of physical, as the other is of mental, education." Not only girls, but men and women, should learn to walk well for the beneficial reaction of the exercise on mind and body.

An easy standing-poise, strong waist and leg muscles, and the habit of natural breathing, form a good preparation for gaining a buoyant, graceful walk that shall produce exhilaration of mind and body. After these, freedom and unity of movement must be developed.

EXERCISE XXIII.

Hold some thought of dignity.

Take a base a little wider than usual and stand with the weight resting equally on both feet. Rise on the balls of the feet, lifting the heels but slightly, and pivot slowly to the right; as the body turns to the right, transfer the weight entirely to the right foot, which will be directly in front of the left foot when a quarter of a circle has been described. Prove that the body rests only upon the advanced foot, by lifting the other foot from the ground without swaying the body forward. Hold the position steadily a moment,

then simultaneously transfer the weight and pivot to the left, describing half a circle; test as before by lifting the foot that is back. Complete the movement by pivoting to the first position.

Pivot as directed, then kneel without changing the position of the feet; rise with the weight entirely over the forward foot.

Advance the foot a step, and take the pivoting and kneeling exercises, the same as at the sides.

The body should not bend nor teeter during these exercises. Kneeling strengthens the muscles of the legs and the ankles, and disciplines them to act independently of the rest of the body. In picking up anything from the floor, these muscles should do the work, the torso being entirely free from action save as it may bend to either side, or in front, to reach the object sought. If the bending is mainly from the waist, the muscles of the back do the greater part of the work and the abdominal viscera are compressed.

The pivoting exercises cultivate an easy action in turning and in transferring the weight of the body, as in changing the direction of the walk, or in simply turning around when not walking—an act that is repeated many times daily, usually with waste of force and with awkward appearance. In turning around, three or four steps are often taken where only an easy pivoting movement and a change in the position of one foot, are necessary. The military "About Face!" is done by pivoting on the heels instead of on the balls of the feet; it is a manœuvre of a body of men where precision is the first requisite. But people would look odd enough if, in a parlor or on the street, they were to balance themselves on their heels, and with noticeable effort swing around into different positions; whereas, if the weight of the body is habitually kept over the balls of the feet, it is the least conspicuous movement possible to turn easily by pivoting in any direction. A high chest and a good poise of the head must always be maintained in this and all other exercises for equilibrium or poise.

EXERCISE XXIV.

Hold some thought of equilibrium.

Advance one foot and stand with the weight on it. From the thigh raise the upper part of the free leg straight out in front, until it is at a right angle to the trunk; at the same time, bend the fore leg back making an acute angle at the knee. Hold this position steadily a moment and then relax the fore leg, letting it fall like a dead weight from the knee. Hold this position as before; lift the heel of the foot that sustains the weight, and for a moment stand steadily poised on the ball of that foot; after which, bring the ball of the free foot lightly to the ground in a forward step, at the same time transferring the weight to it.

Lift the back leg as before and repeat the movement.

The head should be naturally poised and the eyes fixed on some point a little above their own level; if the head droops or is thrust forward, it will cost an effort to preserve the balance.

This exercise is often done imperfectly, the upper leg being lifted only a trifle, or the heel of the back foot not being raised until the ball of the other foot is on the ground. The benefits from the exercise are in proportion to the correctness of its execution.

It is called the Greyhound Movement because of the lightness and elasticity of step that it develops; these qualities are due to the sweep of motion from the hip-joint, and to the relaxed fore leg's giving a light, caressing impact to the foot as it touches the ground. The fore leg must not be placed in the required position, but in each step it must be wholly freed as is the fore leg of a greyhound, and the motion in stepping must be allowed to flow successively from the thigh to the toes.

This exercise strengthens the leg muscles, aids in preserving the equilibrium, and develops the ability to energize and to relax a particular part of the body at will.

While it is one of the best exercises for producing a free, light walk, it should be remembered that it is a gymnastic and not a mode of walking. Goethe says, "A certain mechanical preparation must precede every art." Walking is an art; gymnastics are the mechanical preparation. Not

long since, I was seated beside a recently made acquaintance at a carnival in one of our large cities. The lady, not knowing my familiarity with Delsarte Culture, turned to me and laughingly asked, "Have you ever seen the Delsarte walk?" I replied—and honestly—"No, I never have." "Well, that tall young man promenading with beautiful Miss S—— has it." I looked and saw a young man making himself unpleasantly conspicuous by walking à la greyhound gymnastic. It is such absurdities as this that bring ridicule upon that which in itself is good.

Set methods for special movements would rob people of all spontaneity, all individuality; would make them mere automatons. There is no Delsarte walk, no Delsarte standing position, no Delsarte way to sit down, no Delsarte way of doing anything. The only way we seek is Nature's way. Man can no more *make* natural ways than he can create Truth; he *can* create unnatural ways and falsehood; at his best, he discovers Nature's ways and lives Truth.

Movements that are required for natural expression are often exaggerated in a gymnastic

in order that facility may be acquired. In the greyhound gymnastic, the thigh is raised to a right angle with the trunk in order to gain the power to maintain an easy poise and a free hipaction, while in walking it is raised only slightly, the foot always being kept near the ground.

EXERCISE XXV.

Hold some thought of power through control.

Stand erect, weight on the right foot; with the motor power in the thigh, easily swing the left leg backward letting only the tip of the toe touch the ground. Slowly transfer the weight to this leg and gradually yield the entire foot to the ground. As the back foot is pressed to the ground, raise the heel of the forward foot and swing that leg back, thus making a continuous backward walk.

A gentle, rhythmic motion characterizes this exercise, there being no break between the successive steps. The top of the head will describe an undulatory line. When taken slowly this

walk produces a soothing effect and has often dispelled headache—pain in the temples or the forehead. By reversing the usual order of locomotion, going backward instead of forward, the pressure on the cerebrum seems to be lessened, and the entire nervous system is tranquilized.

Flexibility of the feet is also developed by this exercise; sometimes, there is no more spring in these members than there would be if each foot had but one bone, instead of twenty-six bones. The structure of the arch of the foot is indicative of the elastic movement that the foot should make in stepping.

If one walks gently backward across the room several times and then, without interrupting the motion, changes the direction and walks forward, in the first few forward steps the rhythmical motion induced by the backward walk will be preserved. By continued practice a light, buoyant step will become habitual.

EXERCISE XXVI.

Hold some thought of ease in motion. Stand with the weight on the left leg; from the hip swing the right leg forward, relaxed fore leg, and let the heel lightly touch the ground, the rest of the foot being slightly raised. Then lift the heel of the left (backward) foot, at the same time transferring the weight of the body entirely to the ball of the right foot.

Swing the left leg forward and continue the exercise.

This is a simple but an important exercise, as it is the movement that is made in each step when one walks easily and economically. It will be noticed that the heel touches the ground first, but that the weight is transferred to the ball, *not* to the heel, of the advanced foot.

The buoyancy and spring of movement which should result from the practice of this exercise and from Exercise XXV. cannot be secured unless the body is habitually well poised; therefore, to walk well, it is first essential to stand well and to have strong, responsive waist and abdominal muscles.

In practicing walking exercises, care should be taken not to brace with the arms; let them hang

free from the shoulders. Unless restrained, they will gently oscillate in opposition to the movement of the legs.

Some may object to this motion of the arms and declare that the woman who swings her arms appears masculine—"strong-minded;" they may say that it is more "ladylike" to keep the arms pinioned to the sides. Society is full of conventional constraint, of affectations in physical expression; we need to free ourselves from such bondage if we would be genuine and self-respect-Think of being bound to a conventional ing. form of holding the arms! A conventionalized woman, compared with her emancipated, physically free sister, is as uninteresting and expressionless as is a conventionalized flower in a dado design, compared with the natural flower growing in graceful freedom.

If a woman stands as many men do, with the center of gravity over the heels, and the shoulders too far back, her arms may take as broad a swing as a man's do, and she may be accused of seeming too important; but if her body be poised well, the movement of her arms will not be conspicuous

and the whole expression will be one of ease and refinement. That body is the most harmonious in which the movements of the different members are the least noticeable.

After mastering the "mechanical preparation," one should not think of the body at all in walking. Rather think of abounding life, of the joy of living. If such thoughts be held in the mind, the body will take on similar expressions.

XI.

SITTING: RISING.

EXERCISES FOR PRACTICE.

In beauty, that of decent and gracious motion is more than that of favor.

-Lord Bacon.

LACK of physical education is nowhere more conspicuously apparent than in the way many people sit. Because of this deficiency in their early training, many have no idea of any way of sitting properly other than to sit bolt upright, with the trunk muscles as tense as if they were designed to serve as a straight-jacket. As this position is merely "proper," and not comfortable, few women maintain it save "on occasions" when they are not supposed to be comfortable; at other times, many let the shoulders fall forward and the chest become depressed, quieting their sense of propriety by saying, "Oh, I know it is not the right way to sit, but it is so comfortable." So comfortable! In reality, it is a

fatiguing, unhealthful, unprepossessing position. It seems comfortable because of habit, because the back and the waist muscles by long indulgence have become indolent, and like petted children make themselves painfully disagreeable when occasionally required to obey. The comfort of these external muscle-servants should be held of no moment compared with the comfort and convenience of the delicate internal servants, upon the discharge of whose duties health depends. In this so called "comfortable" position, the interior organs are crowded and pinched beyond the possibility of good work.

Let us learn the true and the beautiful in physical habits as well as in morals, that the vicious may have no attraction for us.

It may be asked, "How are we to sew, or to write at a desk, if we are never to bend over?" One may bend over as much as one likes, if Nature's bending-places—the joints—are regarded; bend from the hips instead of breaking at the waist line.

When the backbone retains its double curve, the chest will be high and all of the internal organs will have perfect freedom. This position should always be maintained when sitting without a back support, as on a piano stool. There are persons who habitually hold this upright position with ease, but generally people who "never lean back" are of the tense, angular order, and, sooner or later, they must suffer the consequence of their severe rigidity.

Centuries ago the old Latin philosopher said, "Straining breaks the bow, relaxation relieves the mind." That the backbone may not lose its flexibility, and that the mind and the muscles may be rested, the backbone should be "unstrung," or relaxed, whenever a support allows.

EXERCISE XXVII.

Hold some thought of flexibility.

Sitting erect, lift and drop the shoulders to free the torso muscles from tension. Place one hand upon the chest and one at the small of the back; slowly sway backward until the body rests against the back of the chair, then sway forward to the original position. If this exercise be correctly taken, as the body sways backward there will be a slight outward curve at the small of the back; the chest will lower a little—become passive in expression—but will not approach a depressed state. When the chest is depressed, the shoulders fall forward; but in this movement they retain their normal position, and are the first to rest against the support.

If the torso be held in a tense manner, as the body sways backward the small of the back will curve still farther away from the back support; this is a fatiguing, an unnatural attitude.

In the latter part of the movement, as the body sways forward, the chest—not the head—will lead; the back will curve inward as the chest rises. The head *always* naturally moves in opposition to the torso.

This simple exercise should be practiced much; it is important, as it teaches how to sit in a manner at once healthful, graceful and restful—restful to one's self and, by its influence, to others.

The hands should not be held conspicuously upon the abdomen. Do not hold them at all; if

they are free from tension they will take care of themselves.

EXERCISE XXVIII.

Hold some thought of harmony.

Sitting with the body resting against the back of the chair, inhale and sway slowly forward, bending only at the hips, until the torso is well over the lap; in the degree that the torso inclines forward, the head inclines backward. Exhale slowly, as the torso rises and the head adjusts itself in harmony with the general move ment; when the torso reaches an upright position, do not stop the movement but continue swaying backward until the body is in its original position. The arms should hang loosely at the sides throughout the exercise.

Repeat at least six times without interrupting the flow of motion.

Take a similar movement, diagonally forward to the right and to the left; also, one directly at each side.

There are many benefits to be derived from this

exercise. It develops the chest, strengthens the waist and back muscles and educates them to precision of movement; by the first part of the exercise, the muscles under the chin are strengthened, which tends to prevent an accumulation of adipose tissue that would result in a double-chin. When several repetitions of the exercise are made in slow rhythm, a soothing effect is produced. It is an exercise that should be practiced daily by all.

Any exercise that moves contiguous or corresponding members in opposition, if taken rhythmically, has a direct influence on the nervous system. Physical strength, beauty, equilibrium, and all high sentiments, are expressed in those lines that have been well termed "the divine lines of opposition."

When leaning against a back-support, the lower part of the spine should be well back in the chair; when it is not so, the chest is depressed, the shoulders are stooped, the back muscles are weakened and sometimes the terminal bone (coccyx) is injured. This habit of sitting is common among children in school; becoming tired

from the inactivity of the muscles, they seek relief in this semi-reclining position. Pupils should frequently be rested and strengthened by exercises in breathing, relaxing and energizing.

Parents and educators need to realize that the bodies as well as the brains of children should receive attention; that it is more essential that a child should know how to strengthen and rightly use his body, than that he should "pass" in technical physiology! To know how to walk well is more important than to know the construction of the foot. A gymnastic is better than a theory. Physical sins are not eradicated by wordy arguments, but hollow chests and crooked spines respond to a good gymnastic.

In no ordinary physical act is more force wasted or more awkwardness seen, than in changing from a sitting to a standing position. The movement usually begins with a jerk—jerks are always weak and wasteful—that brings the body too far forward, and then it is pushed up by straining the back muscles; whereas, those

muscles should be exempt from any direct participation in the movement.

We underuse and overuse certain muscles, because we do not know their proper functions and do not respect their individuality. We must learn to use one part of the body, or one set of muscles, independently of the rest and to let those not necessary to the movement be passive while the others act. The waist muscles are underused when they do not perform their rightful office of sustaining the torso; they are overused when they have any share in raising the body.

In rising, the torso should sway forward—not necessarily slowly—until the center of gravity is brought sufficiently forward; then the body should be raised to an upright position by the strength of the legs. In the act of sitting, one should yield first at the ankles, then at the knees and hips, successively, carrying the torso backward as the hip-joints act.

XII.

CORPULENCY.

LESSON TALK.

A beautiful form is better than a beautiful face. -Emerson.

ORPULENCY is defined by Webster as "an excessive quantity of flesh, in proportion to the frame of the body." The word is commonly understood, however, to mean an excessive deposit of adipose tissue in the abdominal region; in this latter sense it is herein used.

Somewhat of the encumbering adipose tissue present in corpulency is imbedded around the tortuous intestines, but the greater quantity usually forms a superficial deposit; autopsies frequently reveal layers of fatty substance several inches in thickness, attached to the walls of the abdomen.

What causes this abnormal condition and how can it be prevented? Inactivity of the abdominal muscles is the primary cause. Whenever there is

a tendency to undue stoutness, the little cells of fatty substance most easily ingratiate themselves between the fibres of weak, flaccid muscles. Through disuse, the abdominal muscles become ready receptacles of degenerating fatty tissue. No other part of the body is so sedulously guarded against strengthening exercise as is the abdominal region, and no other malformation is so common as corpulency. Fearing injury to the delicate organs in the pelvic and abdominal cavities, some women mistakenly think that all movements that affect this region are dangerous; we hear young girls cautioned about "reaching upward." After maternity, women are inclined to favor this part of the body by half stooping when standing or sitting, thus causing the evils they are seeking to avoid. This unwise favoring of the abdominal muscles is prejudicial alike to health and to beauty of figure. To stoop is to age rapidly. Adipose weaves fetters around human energies. Maternity is a natural function and no physical deterioration, either in appearance or in condition, should result from it. That such deterioration is not a necessity has often been proven; a notable illustration of this fact is the much admired and graceful English artist, Mrs. Kendal, who is the proud mother of ten children.

A careless carriage, in which the torso is held upright mainly by the framework of the body, invites corpulency and is the first cause of many woeful weaknesses; the abdominal muscles being deprived of exercise, become flabby and weak. Such habitual relaxation of these contractile tissues should not be confounded with the voluntary relaxation for rest, elsewhere mentioned; the one is the relaxation of weakness denoting lack of control; the other, the relaxation of strength denoting control.

A sure preventive of, and one of the most efficient remedies for, corpulency is such exercise as calls the abdominal muscles into special activity. As the muscles are strengthened by exercise, the fatty tissue is burned off. To use a homely illustration: fowls are confined in limited quarters to fatten them; as the muscles become weak from inactivity, adipose accumulates. If the fowls are allowed to roam about, to exercise, they run the fat off and their muscles become firm and strong, or "tough."

Corpulency can be most effectively combated not, as might at first be supposed, by exercise of the legs as in walking, running and kneeling, but by movements of the arms and the shoulders, which draw the abdominal muscles upward; also, by the direct exercise of these muscles in certain breathing and torso-bending movements,

The fact that persons are not corpulent who follow occupations that require the arms to be raised much—as painters, paperers, plasterers—is evidence of the strength that such upward arm movements give to the abdominal muscles. It has been observed that washerwomen, a class who use their arms much, are often corpulent and otherwise shapeless. Washerwomen do have much arm exercise but not in reaching upward.

Too much emphasis cannot be laid upon the fact that indiscriminate exercise is not sufficient to keep our bodies symmetrical, healthy, or harmonious in movement. In truth, housework and manual labor in general, as well as brain work, increase rather than diminish the necessity for systematic, nerve-soothing exercise. The restricted mechanical movements that are made day after day in any

ordinary labor or occupation, make the body either dull and heavy, or nervous and angular, in movement. Labor necessitating mechanical motions forms a large portion of the occupations of mankind, but the deteriorating effects of such work can be counteracted by the freeing, and the rhythmical movements of Health and Self-Expression culture.

Women are not responsible for their features, but they are, in a large degree, responsible for their figures. All cannot, of course, have the height or the size they most admire, but neither of these constitutes a good figure. Proportion, not height nor size, is the chief characteristic of a beautiful figure, and nearly everyone can have a well-proportioned body by paying the price for it; namely, exercise.

When we grow to an appreciation of the beautiful lines of the normal human figure, we shall earnestly seek to exemplify "the good, the true, the beautiful" in our bodies; then, full, well-developed chests, delicately poised heads, firm, young muscles will be the rule, and protruding, heavy abdomens will be the exception.

XIII.

EVADING OLD AGE.

LESSON TALK.

It is possible to be seventy years young instead of forty years old.

-Oliver Wendell Holmes.

WHAT is old age? Not the lines of expression on the face which are the carvings of thought and emotion; not the soft, white hair that is like a halo of purity about the face. It is rather, as relates to the body, loss of elasticity, or vigor, of the power to do certain physical acts that were once as spontaneous as play.

Can a person avoid growing old? To a great extent, yes. Of course, a person cannot always remain only twenty years old or avoid being sixty years old ultimately, but he can prevent the marked difference in the physical condition between those two ages. The years will roll ceaselessly by, unheeding individuals, but each individ-

ual has the power to determine in a large degree what the effect of those years shall be on himself. Experience furnishes many proofs in point: a noted danseuse of seventy-five had all the lightness and flexibility of a young girl; a tight-rope walker was expert at eighty; a dancing master was lithe and graceful at seventy-eight. Such illustrations of youth retained by exercise suggest approximate possibilities for all. Years should bring a ripening, enriching influence to the mind, but not infirmity to the body. That they often fail to bring the former and do result in the latter, is due to pernicious habits, mental and physical.

It is generally recognized that "old age" is a relative term. There is no point in years when a vigorous, young-feeling and young-acting person must be called old; while others are old long before they reach fifty years. "As a man thinketh in his heart so is he," is true regarding the physical, as well as the spiritual, man. We expect old age and we are not disappointed; we believe that the years must bring decrepitude and they do; moreover, we hasten the condition that we expect by allowing bad physical habits to enchain us,

How often a woman of forty has the form and the physical expression of a decrepit woman of eighty. Such are in reproachful contrast with some dear great-great-grandmothers who are "as straight as an arrow"—really young in heart and body. Old young bodies are not according to Nature's order; indeed, the contrary condition is promised: "And the child"—not the infirm, old man—"shall die an hundred years old." Longevity in itself is not always "a consummation devoutly to be wished."

How can we keep our bodies young? As Bancroft did, as Gladstone has—by systematic exercise.

People frequently say, "I believe in physical culture; I would join a class but I am too old, my muscles are too stiff." Physical education should not be limited to the period of youth; indeed, those who begin to feel the weight of years, or rather, the crippling effect of bad physical habits, need the help that can be derived from rational physical culture even more than the young do.

By regaining lost flexibility and strength, and learning to economically use his nerve-force, it is possible for many a middle-aged person to make "his last years his best years," physically. One cannot be too old to exercise. So long as we abide in our bodies, we should strengthen them by daily exercise as much as by daily food.

Regarding stiff muscles—but why regard theoretically what do not exist in reality? Muscles
are never stiff unless the flesh be swollen or
frozen. Muscles that are called stiff are either
tense or weak: if tense, the remedy is exercise
that will produce muscular passivity; if weak,
the remedy is exercise that will produce strength.
Let a person be compelled to maintain a recumbent
position for weeks and, although there be nothing the matter with the leg muscles, he will find
on attempting to walk that by disuse these naturally strong, obedient muscles have become as
weak and ungovernable as a baby's; but they are
not stiff.

Muscles that are not duly exercised lose their shape, firmness and strength. Nowhere else does this muscular degeneracy so rapidly "steal away our youth" as in the waist muscles. A woman is twenty years older or younger, in looks and feel-

ings, according to the condition and the use of these muscles.

Joints may become stiffened and "run hard," as do the bearings of a machine that has long been unused. Oil and exercise are the remedies for the body as for the machine. To provide the exercise is each person's responsibility; that being done, Nature will prepare and apply the synovial lubricating fluid.

Dr. William G. Hammond says, "If it were possible so to adjust the repair to the waste of the body that neither would be in excess, there is no physiological reason why life, if protected against accident, should not continue indefinitely." With many, waste begins to exceed repair as soon as childhood's irresponsible period is passed. The main cause of this loss of balance is tension. [See chapters on "Relaxation, Receptivity, Recuperation," "Insomnia" and "How to Rest."]

It is a noticeable fact that women who lead broad lives, who are actively engaged in public work—literary, social, church and reform movements—remain young longer than do those whose lives are "narrowed in a narrow sphere." This is not because of the difference in the kind of work, but because of the difference in the thoughts back of the work.

When the thoughts are not somewhat occupied with general interests, one is liable to become too much absorbed in self. Such absorption leads to selfishness; selfishness causes tension, limits the sympathies, prejudices the mind, and ages the body. Who ever associated anything but age with the thought of a recluse, or a hermit. The fountain of rejuvenescence is fed by human sympathies.

Whatever their vocation, women should realize that the boundless sphere of helpful, beautiful and beautifying thought belongs to all; we have but to take possession of our own. Let us expel thoughts of infirmity, of time; let us guard against the bodily manifestations of age. Let us hold ever the thought of Eternal Life, realizing that Now is a part of Eternity and that the spirit is ever young.

XIV.

THE SECRET OF SYMMETRY AND YOUTHFULNESS.

EXERCISES FOR PRACTICE.

All means that conduce to health can neither be too painful nor too dear to me. -Montaigne.

Everything depends upon exercising the trunk, which gives poise and motion, and whenever you can substitute a more deliberate motion or rhythm of work and speech, you are substituting a healthy for a morbid nervous diathesis.

-Dr. G. Stanley Hall.

THE exercises of Self-Expression and Health culture help to keep the body young and symmetrical.

They remove tension; tension causes decrepitude by increasing the waste, and obstructing the repair, of the body.

They produce and preserve flexibility; flexibility is a distinguishing characteristic of youth.

They establish a correct poise of the body,

without which the figure cannot maintain its true proportion; lacking that poise, even a child's body may take on an appearance of old age or of deformity.

They forestall corpulency and decrepitude by fortifying those parts of the body that are their favorite points of attack; namely, the waist and abdominal regions. Upon the firmness, the vigor and the suppleness of these zones, depend youthfulness and bodily symmetry.

While there are certain exercises that particularly ward off those undesirable conditions, corpulency and decrepitude, it is essential that the general exercises for the use, the control and the development of the body, should first be mastered. One cannot learn to walk well before he learns to stand well; in like manner, the benefits to be derived from special exercises depend upon the previous preparation therefor.

EXERCISE XXIX.

Hold some thought of controlled force.

Standing upon the right leg, swing the left leg backward, letting the toe touch the ground as

in a backward step. Transfer the weight to the left leg, and lift the forward foot from the ground. (1) Keeping the whole of the left foot upon the ground, raise and lower the body rapidly several times by bending and straightening the left leg. (2) Repeat the movement, resting only the ball of the back foot on the ground.

This exercise develops strength and control in the muscles of the legs which should be used in the acts of rising and sitting.

In going upstairs, the same principle should be observed as in rising from a chair. A woman should not extravagantly bend over to pick up the dress and with the body in that bent position, push it upstairs, reaching the top exhausted and out of breath. Instead, she should lift the dress with an independent movement of the arms, hold the body erect, the chest being expanded as in Exercise XVIII., and let the legs do the work of carrying the body up the stairs.

Some women dread to mount a flight of stairs, believing that they suffer positive injury from so doing. In most instances, the injury results from the way in which the act is performed.

Eminent physicians prescribe stair-mounting for heart troubles. Avoiding any extra physical exertion is inadequate protection for a heart whose action is weak. No person can be insured against the sudden excitement of grief, joy, or surprise, which would cause the blood to rush to the heart with increased force. If the heart has gradually been strengthened by daily physical exercise that makes it do a little more pumping than is required for the ordinary acts of life, it is then prepared for emergencies.

Much less energy is expended in ascending stairs with a light, springing step, letting only the balls of the feet touch the stairs, than when the step is heavy and a momentary rest is made upon each stair. It is with the human body as with other objects: when it is at rest, a certain amount of force must be exerted to overcome its inertia, but once this is overcome, the momentum created tends to continue the movement. There should be but one impetus in bringing the torso forward, in rising and walking; to make two or three separate movements here is to waste force and to lose beauty of expression.

EXERCISE XXX.

Hold some thought of expansion.

Stand erect with the weight on both feet, the arms hanging relaxed. From the shoulder rotate the arms inward moving them forward until the backs of the hands nearly touch, then raise the upper arms until the forearms and the hands hang pendent in front of the chest. At this point, slowly but simultaneously rise on the balls of the feet, take a deep inspiration and raise the arms high over the head, letting the tips of the relaxed fingers of the two hands lightly touch one another. With a flexible wrist movement daintily raise the hands, then with energy rotate the arms outward moving them downward; when they are directly in line with the shoulders, palms backward, vigorously press backward with the hands, keeping the chest up and the head well poised. Hold this energized position a moment, then quietly exhale and, at the same time, come down upon the whole of the feet, letting the arms sink to the sides. Without interrupting the movement of the arms, repeat the exercise ten or twenty times.

If only one gymnastic exercise were to be practiced daily, this all-around one would be advisable in most cases. By it, the whole body is invigorated, the abdominal muscles are made firm without possible injury, the lungs expanded, the chest muscle developed, the shoulder-blades flattened, the arms rounded, and the back, waist and leg muscles strengthened. While respiration and circulation are stimulated, the nervous system is tranquilized.

This exercise is one continuous movement, but it includes relaxation, energization and guidance of the nerve-force; it is because of this variety that it can be repeated many times without fatigue. The effect is elevation, physical, mental and spiritual. The chest is raised, the emotive zone is expanded, the abdominal zone is held up, the knee-joints are straight and the body is poised lightly on the balls of the feet, while the arms by their action tend further to uplift and to expand the body physically; there will be a corresponding spiritual and mental inspiration. As we yield to gravitation and let the head, the chest, the abdomen, the knees, sink, we become heavy in movement and despondent in expression.

EXERCISE XXXI.

Hold some thought of vigor.

Advance one foot as in a long step and stand with the weight on it. Extending the arms parallel to each other in front until they are in line with the shoulders, energize them and close the hands as if each were firmly grasping a rope. Keeping the eyes steadily fixed on some point about two feet above their level, inhale, and slowly but with great energy pull the extended arms down and well backward; at the same time, bend the torso forward but do not transfer the weight of the body. The head bends backward in opposition to the torso. Hold the energized position thus secured for a moment, then withdraw all unnecessary nerve-force from the muscles and exhale as the body rhythmically returns to its original position.

Repeat several times in succession.

It is helpful in this exercise to imagine that by, means of two ropes, one is pulling some heavy weight that must be moved with care and not jostled. Put all the force possible in the arms, and brace firmly with the forward foot, but do not strain with the back. This educates the arms and the legs in lifting and so relieves the overworked back. The back often ages under burdens not its own.

This exercise is also admirable for strengthening the lungs and developing the chest. Drawing the arms vigorously backward as the torso bends forward and the head moves in the opposite direction, exercises all of the chest muscles, and will fill out the hollows in the neck, if much practiced.

EXERCISE XXXII.

Hold some thought of buoyancy.

Fold the forearms firmly across each other back of the head, keeping the chest well up and poising the head slightly backward. Raise the heels as high as possible, and with a free swing from the thigh, walk lightly and rapidly on the balls of the feet.

Unless a good poise is maintained there will be an unpleasant strain on the muscles of the back;

but if the torso is kept well forward, the back muscles will not be fatigued.

The arms should be held in position, not allowed to weigh against the head or to push it forward; the amount of exercise given to the abdominal muscles will be in proportion to the energy used in raising the shoulders and the arms. Dr. John Harvey Kellogg says, "Properly graduated exercise, with such an adjustment of the clothing as will afford opportunity for free and unrestricted movements of every group of muscles in the body, is a most important therapeutic means in the management of a large class of pelvic disorders." Exercises that stretch the abdominal muscles upward counteract, in a measure, the evil effects of heavy skirts and of a careless poise. If the figure is normal, a few minutes' daily practice will suffice as the "ounce of prevention," but if there are abnormal conditions to be overcome, it is necessary to take the "pound of cure."

EXERCISE XXXIII.

Hold some thought of animation. Stand erect, with the weight upon the left foot. To four slow counts, simultaneously raise the right arm diagonally forward shoulder high, and advance the right foot as far as possible without moving the body. On the next four counts slowly inhale, transfer the weight to the forward foot, raise the right arm to a vertical position; lift the relaxed hands until the palm of the right one faces the ceiling and the palm of the left one faces the ground. Energize all the limbs and vigorously push with them; the left foot will be lifted from the ground by the upward push of the right hand. Hold this animated position steadily as long as the breath can easily be retained, then exhale and take a momentary rest by relaxing the hands and letting the toe of the back foot touch the ground; after which, inhale, energize, push, and hold the position as before. Exhale, relax the hands and let the toe of the back foot touch the ground: on four counts transfer the weight to the back foot and bring the right arm down to a level with the shoulder. On the next four counts, the arm and leg are brought back to their original positions.

EXERCISE XXXIV.

This exercise is identical with the preceding one, except that the arm and the leg are moved directly out at the side in line with the strong leg.

EXERCISE XXXV.

This exercise is similar to Exercise XXXIII., the variation consisting in the different direction taken by the corresponding arm and leg. In Exercise XXXIII. these two members move in the same direction, whereas, in this exercise, as the right arm is advanced in front, the right leg is swung back; the weight is transferred to the back leg and the arm is brought vertically up as before. In pushing, the forward foot is raised from the ground.

These poising exercises strengthen and invigorate the entire body; they are especially effectual in straightening figures that are somewhat stooped, and in overcoming corpulency by making the waist and abdominal muscles firm. Whenever a muscle is strengthened, it is guarded against

superfluous adipose tissue. The side poise particularly affects the muscles over the hips.

It is essential in these poising exercises, that the arm and the leg move in perfect rhythm, beginning their movements as with one impulse and ending them together. This gives control over the members and healthfully affects the nervecenters. Dr. G. Stanley Hall says, "There is one subject (rhythm) that is fundamental and yet is often ignored. . . . I do not believe it is easy to overestimate the importance of it. There is a profound and close relationship between our muscle habits in that respect and thinking."

EXERCISE XXXVI.

Hold some thought of rhythm.

Standing in normal poise, inhale and raise the arms laterally to the level of the shoulders with the hands extended, palms upward. Keeping the arms and hands in this position, slowly bend the torso to the right side. After holding the position a moment, raise the torso to its normal poise, then let the arms sink to the sides as the breath is gently exhaled.

Inhale and raise the arms as before; twist the torso to the right and bend backward in a direct line with the right arm. After holding the position for a moment, raise the torso, untwist it, and then let the arms sink to the sides as the breath is exhaled.

These bending and twisting exercises develop control and flexibility; they give a rounded contour to the waist, strengthen the back and abdominal muscles and prevent an undue accumulation of adipose tissue over the hips. They are. however, quite severe and should not be taken until the torso muscles have been prepared somewhat by the practice of easier movements. The strength and the condition of the individual should always determine the amount and the kind of exercise to be taken. Although women deteriorate physically more from lack of exercise than from any other cause, save tension, it is better for those who are commencing to discipline their bodies to underdo than to overdo in exercising. All growth is gradual.

EXERCISE XXXVII.

Hold some thought of suppleness.

Take a wider base than is habitual and put the weight entirely on the left leg; raise the left arm until it is directly vertical and close to the side of the head, the palm being turned inward. Inhale and stretch vigorously upward on the left side, the whole of the left foot remaining on the floor. The right side is free and acts as a balancing weight. Exhale and slightly relax muscles of left side and limbs; then inhale and repeat the stretch. Keeping the weight on left foot, exhale and relax toward the right side successively, the fingers of the uplifted member, the hand, forearm, arm, then the head, shoulders and body. The right arm and leg remain free. Slowly energize the torso, shoulders, arm, forearm, hand, fingers, and again vigorously stretch upward. Gently relax, let left arm sink and, at the same time, transfer weight to the right foot.

Repeat exercise on right side.

This exercise is one of the best to keep the muscles young and elastic in action, and to keep

the waist and hip muscles firm and strong, thus preventing the accumulation of adipose tissue; it also stimulates all the digestive functions.

The daily practice of this exercise is especially recommended to stout people and to those who are inert and heavy in movement. Anyone who has pelvic trouble should be cautious in taking this, or any other movement where the torso is bent sideways or backward.

EXERCISE XXXVIII.

Hold some thought of precision.

Sit erect, the arms and the legs being relaxed and the head well poised. Keeping the head on a horizontal plane, slowly turn it until it is directly over the right shoulder; then bend it backward in a diagonal line, until the face is turned directly toward the ceiling, and then forcibly rotate, or screw, the head around to the other shoulder. Slowly lift the head (the face will be over the left shoulder) and turn it forward and to the right shoulder again.

Repeat several times, each time turning the head more slowly.

In turning the head, the torso should not move, nor the chin be elevated; the movement should be continuous and smooth.

One of the places where the marks of age are first seen is in the muscles of the neck. From lack of exercise, these muscles become weak and flaccid. Good poise of the head can be developed, and nervous, jerky movements of that member be overcome by this exercise; also, severe pain at the base of the brain has often been relieved by it.

EXERCISE XXXIX.

Hold some thought of flexibility.

Standing in the normal poise, raise the arms straight up from the shoulders, rise on the balls of the feet and energetically stretch upward; come down slowly upon the feet and, being careful to keep the knees straight, at the same time, bend at the hips and reach outward as if trying to touch the circumference of a large circle. After reaching outward and downward as far as possible, instantaneously relax all of the muscles except those of the legs; then allowing the energy

to creep gradually upward, rise to an upright position,

In bending forward a strain is brought back of the knee, but as no vital organs are situated there, no injury will result from it. There should not be even a suggestion of strain in the muscles of the back. When the arms are first relaxed, they will oscillate like pendulums.

That this exercise gives great flexibility is proven by the fact that some persons when first attempting it, cannot touch the ground with their fingers within several inches; by practice, they are enabled not only to touch it, but oftentimes to place the palms of the hands flat down. If a woman thirty years old can thus touch the ground by devoting three minutes each day to the practice of this exercise, would she not be able to do the same at seventy or ninety years of age? Surely such practice would be a small price to pay for continued youthful flexibility.

XV.

INSOMNIA.

LESSON TALK.

Oh sweet forgetfulness of sleep! Oh bliss, to drop the pride of dress, And all the shams o'er which we weep.

At morning only—strong, erect— We find refreshed our self-respect.

-J. G. Holland.

NPLEASANT as insomnia is in itself, it is but the premonition of worse derangements; as, nervous prostration, softening of the brain, paralysis, insanity. Small wonder that some of the ablest minds in the medical profession to-day consider it one of the principal dangers that threaten civilized man, and that they seek to find some safe remedy for it; safe, because the drugs that effect this condition, such as bromides, chloral, opium, are scarcely lessinjurious to the brain and the nervous system than is the continued loss of sleep.

What is sleep and what constitutes it "Tired Nature's sweet restorer"? Seemingly, nothing that is sustaining, as food or drink, enters the system during sleep, except air, and the difference between one's breathing when awake and when asleep, is not sufficient to account for the restoration of depleted forces that occurs during sleep.

The recuperation of the wasted powers during sleep is due to no known cause in the body itself. There is no organ that has any such extraordinary repairing function; moreover, during sleep all the organs fall into partial, or entire passivity while the restoration is taking place. It is plain that the rebuilding of the body, the brain and nerves during sleep, is done by a force from outside the body and beyond the volition. This force is active; it sustains life; hence it is named VITAL ENERGY. More than this concerning it even the most profound scientists know not. Everywhere, in plants, animals, man, are seen its manifestations, but the force itself eludes man's most scrutinizing search.

Sufficient for our present purpose is the knowledge that this supply of life is of Divine

origin; that it is not generated in the body; that the body is only an instrument through and on which vital energy acts; and that certain bodily conditions are favorable, while other conditions are unfavorable, to its reception. This vital energy is inexhaustible and is available to every person; if allowed free inflow it will always give "life abundant." We ignorantly refuse to admit it when we put tension into our bodies. Tension always interrupts the harmonious action of the life currents. In sleep, conscious thought and will are at least semi-passive, and according to the degree of their passivity is the amount of benefit derived from the sleep: for the results of sleep—rest and restoration—are only the effects of the inflowing of this vital energy.

There is sleep and sleep. Frequently when a person is in a nervous, tense state, a fitful sleep supervenes from sheer physical exhaustion; as he begins to doze, the dominant habit of tension reasserts itself and he awakens to full consciousness with a start, often accompanied by a nightmare sensation of falling down a flight of stairs or a precipice. Such sleep brings but

slight refreshment to the tired brain and body. Even when thought gives up its conscious sway, the nerves remain taut—ready, like the horses of a fire engine, to spring into action at a touch or a sound.

The remark is sometimes made, "I slept so hard, I am tired." This is a self-evident absurdity; the "hard" was not in the degree or the quality of the sleep, but in the hard, strained condition of the nerves which prevented restful reinforcement by vital energy.

People who work with little hurry and less worry, require the least sleep of any; they expend nerve-force economically; moreover, there being no abnormal tension, partial restoration takes place even while they work. Such people, however, usually do sleep more than nervous people; having but little tension in the body at any time, it is easy to surrender that little. Theirs is the "balmy," childlike sleep that upbuilds and beautifies.

The all-important question is, How can normal sleep be induced? Plainly, by getting rid of the adverse conditions that prevent it. Chief

among these conditions are muscular strain and mental excitation. First, we need to free ourselves of all tension, to surrender self, to make our bodies as heavy and relaxed as is the body of an intoxicated man, in whom the mind is stupefied and all volition suspended.

Another excellent illustration of a perfectly relaxed state is that of the healthy sleeping baby. How heavy is the hanging arm, or leg, or head!

Of course, with the sleeping baby and the intoxicated man, the muscular relaxation is simply an effect corresponding to a similar passive state of the mind. Outward manifestations are always reflections of inner states; but, while we acknowledge the sovereign sway of the mind, we can by physical exercises steal a march, as it were, on the thoughts. By exercise we change the circulation of the blood, change the vibrations of the nerve-currents; and thus, while the mind indirectly, or automatically, has guidance of the exercise, the thoughts themselves are changed—a double effect, physiological and psychological. To stop

thinking or to control the distracting thoughts would seem a hopeless task to many; but to know that it is possible for a nervously tense body, by the practice of certain exercises, to become a restfully relaxed body, its stiff stubbornness to become graceful obedience, and the mind gradually to become sympathetic with the body, should give encouragement to those who are nervous and sleepless.

We woo sleep when we yield the body, when it feels like a heavy mass,—so heavy that it would require a great effort to lift even one of the dead-heavy arms. This sensation of muscular weight is experienced when one is partially aroused from slumber before he is rested; we can then even sense the weight of the eyelids as we languidly open them.

To get a realization of the weight of the entire body, have two friends support you by holding you at the waist and by the arms, as you fall like a lifeless weight; if you completely relinquish all control of your body, it will be with difficulty that your friends can keep the relaxed, heavy mass from the floor. Sometimes a little

child instinctively makes its body limp and unmanageable when its inclination is opposed.

As we lie in bed we should relax and get a similar sensation of the heaviness of the body; then we are scientifically seeking sleep. Instead of this, when wakeful, we vainly wish and wish that we could sleep, and roll and toss wearily from side to side. When we hold ourselves as if in action, instead of letting the bed hold us, we repulse sleep. Such activity means tension and tension is the arch-enemy of sleep.

Physical relaxation is not, however, all that is necessary to induce sleep. We must also be able to banish the anxieties and hobgoblins that are prone to haunt the tortured hours of night. We must have control of the thoughts as well as of the body.

This power can be gained in two ways: either indirectly by exercises (see specific exercises in the following chapter), or by the direct effort of mental concentration. Muscular passivity is, however, requisite for true mental concentration because muscular tension absorbs and wastes the energy that should be centered on

the thought. Concentration does not necessarily imply intensity or importance of thought, but singleness, or isolation, of thought. It is "thinking at a mark and hitting it." The great value of concentration as a sleep-promoter is that it gathers all nerve-force to a center and employs it upon one simple operation of the mind; when all the nerve-force is so focused, it is an easy matter to relinquish that single hold on consciousness.

Concentration can be developed by an effort of the will. The will rightly used is a source of power; its expression in tension is a perversion of its rightful use which works evil to mind and body. Rightly used, the will becomes the power that determines the character of the thoughts and gives them guidance. One has said, "The thoughts are the builders but the will is the architect." The action of the will is easily perceived. Try to exclude all other thoughts and to hold but one, as "God is Love"; in a second or so, some other thought will rush in, but by an act of conscious will, the intruding thought can be rejected and the attention returned to "God is Love," Again and again will irrelevant.

undesired thoughts force themselves into the mind, but they can be as persistently banished by the will. With every such exercise of the will, the power to concentrate the thoughts increases.

It is a healthful use of the will to keep destructive tension-thoughts out of the mind and to hold restful, upbuilding ones in their stead. Nor is this a stupendous task; on the contrary, it is a simple and a delightful one withal. Delightful, because the first successful attempt at concentration gives a new sense of power; one begins to be his own master.

In seeking sleep all one has to deal with is the present moment. See that the present thought is a constructive, wholesome one. Do not anxiously seek to probe the future, nor look back regretfully at the past, for that kind of "looking backward" in itself provokes tension. Realize only the present; it is a part of eternity and the only part with which we have to cope.

When seeking sleep we are seeking oblivion from the affairs of our material existence. What folly, then, to obstinately cling to them as we do, when in thought we plan what we shall do, say, wear, eat, or see; or, when we review what we did do, say, wear, eat, or see at some previous time, in thought trying to improve upon the past! This is clinging to action while courting repose.

Let go physically; abnegate all muscular control. Concentrate the thoughts upon some abstract, *impersonal* subject, upon the *recreative* power of sleep, or upon the tranquil joy of wholly yielding the "individual to the universal." Realize that we are resting in the "eternal arms." Lay aside personal desires and wait as the Greeks did when "The soul waits upon the gods." Such states are in themselves recuperative and induce sleep when the system requires it.

XVI. WOOING MORPHEUS.

EXERCISES FOR PRACTICE.

Man's rich restorative; his balmy bath,
That supples, lubricates, and keeps in play
The various movements of this nice machine,
Which asks such frequent periods of repair.
—Young's "Night Thoughts."

THE immediate cause of insomnia is abnormal activity of the brain which draws an undue amount of blood to that organ. Cold feet usually accompany a heated brain. To reestablish normal conditions, the tension must be removed and the blood drawn from the brain to the extremities, thus equalizing the circulation. Then, by soothing, pacific exercises that shall quiet the nerves and at the same time concentrate the wandering, distracted thoughts, sleep can be induced.

Relaxing exercises (see Chapter VII.) alone are oftentimes sufficient to banish insomnia, if

it has not become habitual. In all cases these exercises must have been so well perfected that one can instantaneously relax the voluntary muscular system; not until one has gained this power is one prepared to advantageously take the special exercises for overcoming sleeplessness.

Just before retiring take the following exercises in the order as given:

Vigorously take Exercise XXII. several times in quick succession. This will occasion a general vibration of nerve-force and, by causing an increase in the circulation, will overcome a tendency to congestion in any part of the body.

EXERCISE XL.

Hold some thought of resistance.

The weight being on one foot, extend the other a long step diagonally forward, touching the toe to the ground. Partially transfer the weight to the forward leg, at the same time bend that knee as much as possible and raise the heel high from the ground, keeping the whole of the back foot on the ground until this position of the bent knee and the raised heel of the forward leg is firmly taken.

Then, gradually pull all but the toe of the back footfrom the ground, while forcibly pressing down with the forward leg, as if overcoming a strong resistance. The forward knee straightens, the whole foot comes to the ground and the weight is entirely transferred to the forward leg, during the movement. Slowly transfer the weight to the back leg, forcibly pushing that foot to the ground as the heel of the forward foot rises. Repeat these movements several times; after which, alternately bend the knees and rise on the balls of the feet rapidly, six or eight times.

There should be no straining or pushing with the torso; it should be maintained easily erect and free from tension; nor should the arms work, nor the head be held, nor the face muscles be contracted. The legs only are energized.

If sufficient force is exerted in pressing the feet to the ground, after five minutes' practice they will glow and tingle; should this not result, it is evidence that the exercise has not been correctly done. That the extremities be warm is a necessary condition for reposeful slumber. Causing the blood to vigorously course through the legs and the feet, removes stimulation from the brain and thus produces another condition essential for sleep. To obtain a similar effect, physicians sometimes advise the taking of some light nourishment just before retiring, in order to make the digestive organs act. Activity in any part of the organism causes an increased flow of blood to that part.

This exercise also develops strength in the legs and flexibility in the feet; it is an aid to an elastic, graceful walk. Cramps in the feet have also been overcome by it.

EXERCISE XLL

Hold some thought of tranquility.

Sitting erect so that the feet easily rest upon the ground, look steadily at some point in the ceiling while taking five slow, deep breaths. Let the eyelids droop heavily and the head sink gently until the chin rests upon the chest then relax the back as far as possible, vertebra by vertebra; last of all the hip-joints act, causing the relaxed torso to sway forward until it reaches the lap—the head still being pendent. In returning to the original

position, reverse the order of action: the hip-joints act first and the motion creeps into the back until the spinal column regains its double curve which lifts the chest; then the head almost imperceptibly lifts to its normal poise, after which the eyelids languidly open as do a baby's when the little one seems unwilling to surrender to heavy drowsiness.

This exercise secures a threefold benefit; it develops singleness of attention, it partially stupefies the brain and it directly soothes the nerves.

Affect the spinal column in any way and the whole
nervous system sympathizes. When correctly
done this exercise always produces a sensation of
sleepiness. It is, however, difficult to get the
controlled, even motion which is essential in order
to tranquilize the nerves; this usually requires
considerable practice under the direct attention of
a teacher.

With some, isolating the thought from worldly and personal affairs for a few minutes is in itself sufficient to induce sleep. The success of such simple sleep-producing devices as counting supposititious black cats, watching imaginary sheep jump

a fence, or reciting difficult rules, is due to holding the attention to one subject. When a movement that directly quiets the nerves is combined with such isolation of thought, there is a double influence exerted in favor of sleep.

Again, the pendulous position of the head causes more blood than is normal to remain in the blood-vessels of the brain; they become distended and by their pressure upon the brain produce a semi-stupor. Thus, through exercise an over-stimulated condition of the brain may be changed into its opposite condition—stupor.* The immediate effect of this exercise on the brain is similar to that produced by soporific drugs, but there are none of the evil after-effects of those drugs, because the exercise produces simply a temporary drowsiness that soon passes away as the circulation becomes natural; but during those few moments of stupor, sleep may claim her own.

This exercise should occupy at least three minutes; the slower the movement, so that it be

^{*} For an analysis of the difference between stupor and stimulation of the brain, see Dr. Wm. G. Hammond's work on "Sleep."

continuous, the better the results. If done slowly and rhythmically, not more than three or five repetitions should be required to produce drowsiness sufficient to make one able to unreservedly relax and sleep.

It is needless to say that this exercise must never be taken in tight clothing. Before commencing it, one should be prepared for retiring even to having extinguished the light, so that no irrelevant thought or action shall divert the attention, or disturb the induced somnolent condition.

Should sleep not follow the foregoing exercises continue to woo Morpheus by Exercise XLII.

EXERCISE XLII.

Hold some thought of release from care.

Lying in an easy position, slowly raise the arms as high as possible, the hands being relaxed. More slowly still, lower the arms letting the fingers touch the covering first, then the hand, the forearm, successively; last, the nerve-force is released and the whole arm is at rest. Accompany the exercise with deep, slow respiration.

Repeat several times, making the movement more slowly each time.

This exercise is also an excellent one for nervous people to practice at any time; it can be taken in a sitting as well as in a recumbent posture. The reciprocal action between mind and body is evidenced by the quieting effect that five minutes' practice of this exercise will produce when one is nearly distraught with half a dozen perplexing things that crowd for immediate attention.

The slower and more sustained any movement is, the greater the nerve-control.

Many people are troubled with wakefulness in the night, after a short sleep has given partial refreshment. It then requires some determination to rise and to take exercises, although that is the only way in which some persons can obtain relief. Frequently the practice of Exercise XLII. will reinduce sleep; or, gently rolling the head from side to side at the same time taking long, regular breaths, may prove effectual; or, opening the mouth wide with each deep inhalation and

repeating the syllable "om" will often result in yawning and drowsiness.

Above all, be trustful; banish apprehensions and misgivings. Do not let the troubles of the day make the night a tribulation instead of a benediction. To trust is to lay our burdens down, to relinquish our fears; this is to relax mentally and physically; then sleep comes as a tender infoldment from Him who "giveth His beloved sleep."

XVII.

NERVOUSNESS-A CAUSE AND A CURE.

LESSON TALK.

In quietness and in confidence shall be your strength.
—Isaiah xxx; 15.

"HURRY is the devil," says an Arab proverb. This suggests the cause of many physical and mental evils, of which nervousness may be said to be the chief. Natural functions of life, unnaturally performed, affect the nervous system unhealthfully. The voluntary functions are the only ones directly under our control but these, in turn, influence the involuntary ones; an abnormal condition of one of the former, seemingly unimportant, may result in serious derangement of one or more of the latter.

Breathing, talking, eating, walking, moving, resting are natural operations of life, and Americans, who are the most nervous people in the

world, breathe, talk, eat, walk, move, and try to rest, in a disastrously *hurried* manner. As one has said, "We do literally bang and tear our bodies and our brains to pieces by our hurried, ungoverned movements which engender frantic, uncontrolled thoughts." It is a law of physiology as well as of mechanics that speed is obtained at the expense of power.

Dr. George M. Beard says, "Punctuality is a greater thief of nervous force than procrastination is of time. We are under constant strain mostly unconscious, oftentimes in sleeping as well as in waking hours—to get somewhere or to do something at some definite moment. A nervous man cannot take out his watch and look at it when the time for an appointment or a train is near, without affecting his pulse and the effect upon the pulse, if we could but measure and weigh it, would be found to be correlated to a loss to the nervous system. . . . Those who would relieve their nervousness may well study the manners of the Turks—the follower of the Prophet is ashamed to be in haste." A rule similar to that in the Turkish code is laid down for us in the declaration of the Psalmist: "He that believeth shall not make haste."

Hurry means tension; we may move rapidly without tension, as in dancing or in any balanced action, but to hurry without tension is impossible.

Again and again, we return to the source of all physical expressions, the mind. Hurry is in the mind first and does its worst mischief there. One may walk miles without fatigue if one's thoughts be not on the walking, and at the end of the journey be hardly conscious of having made it. Lovers in country towns stroll for hours on moonlight nights, and are inspirited rather than fatigued by the exercise. But let a person walk some little distance, feeling a driving necessity to reach a certain place at a certain time or for a certain purpose, and he will reach his destination worn and tired.

Fatigue is always in exact proportion to the amount of nerve-force expended over and above the amount received during the same time, whether that expenditure be through the use of the muscles or through the use of the mind only. A thought may consume more force than a blow.

If a person thinks he has not time sufficient for his purpose, the effect on his organism is similar to that of doing ten hours' labor in eight hours. An insolvent merchant goes through bankruptcy perhaps fifty times before making an assignment, and each time that he rehearses in his mind the anticipated failure, it has a more disastrous effect on himself than do the actual proceedings when they occur. Indeed, the common experience of the insolvent man when the crash has come to pass is one of relief. Even in a dream—a counterfeit and unconscious thinking—one can become physically exhausted by visions of excited action or peril.

It behooves us all, nervous people especially, to keep a watch on the thoughts; we ruinously discount the present and incapacitate ourselves for the demands of the future, when we give audience to thoughts of anxiety, anger, doubt, fear, petulance, despondency. Every order of thought counts for or against us, physiologically. In the words of Dr. John Armstrong:

Know, then, whatever cheerful and serene Supports the mind, supports the body, too, Hence the most vital movement mortals feel Is hope; the balm and life-blood of the soul.

[See suggestions for gaining control of the thoughts, in Lesson Talk on "Insomnia."]

Guarding the words is an initiatory step toward controlling the thoughts. The "familiar fret" of many nervous people is an irritant to body and mind. As Lilian Whiting says, "Worry is a state of spiritual corrosion. A trouble either can be remedied, or it cannot be. If it can be, then set about it; if it cannot be, dismiss it from consciousness, or bear it so bravely that it may become transfigured into a blessing."

Mind being the first cause of all outward expressions, it can readily be seen how healthful and helpful to all nervous and ailing persons is a training that leads to more reposeful states of mind. Psycho-physical culture does this. The physical and the psychical natures act and react upon each other; mental states can be recast by such physical exercises. When one feels a "fit of the blues" coming on, if, instead of giving himself over to distorted visions and vague forebodings, he would try to express physically the lightness of spirit symbolized in the statue of the "Flying Mercury," by putting

his body into the same balanced, buoyant poise, the "blues" would take wings to *their* heels and fly away. Such an exercise requires a nice adjustment of the different members of the body, it concentrates the nerve-force on the act, starts the circulation, affects the respiration; and these material changes incite new thoughts and feelings.

Perverted emotions and morbid imaginings make dangerous havoc upon the mental and physical powers. We need to shun such mental profligacy as we would moral error. Irritableness is a mental state so closely related to insanity that we unconsciously recognize their resemblance; it is frequently offered as an apology for the infliction of pain or injury by a person in an irritable mood, "Yes, I know she was unjust, but she was not responsible for what she said." In this state the emotions are easily excited; trifles affect one unduly; mole-hills are magnified into mountains; suspicion usurps the place of confidence; physical ailments are aggravated. Irritableness is largely a matter of over-wrought nerves, relaxation is an antidote; it aids one in gaining the mastery of one's moods.

To surrender self-surveillance, to become passively receptive, is the first step toward getting rid of nervousness. The muscular abnegation attained through the relaxing exercises is always accompanied by—or, more accurately speaking, is preceded by—a corresponding abnegation of the will. The will, consciously or unconsciously, is ever active in tension. Muscles in themselves are never tense; it is the current of nerve-vibrations—or, as some scientists state, the aura surrounding the nerve-fibers—which, penetrating the muscles, causes them to seem tense. Subtle as this force is, by mental concentration and physical discipline, we can control it.

Every person can cultivate the habit of completely relaxing for two or three minutes even in the busiest hour of a busy day. If the business man at his desk, the tired mother at her sewing, the overwrought teacher with her pupils, the student in his study, would release all the muscles, let the head hang heavily upon the chest, close the eyes, and make the mind as nearly blank as possible, noticeable reinforcement would result. From the simple often

comes the marvelous. In class, women frequently remark, after taking the relaxing exercises, "It is strange, but these exercises rest rather than tire me;" or "I feel sleepy when I take these exercises even though it is in the forenoon; if I should so relax while listening to a lecture or a sermon, I should surely go to sleep." Is it not pitiable that the nerves should ever be kept under the whip-lash of the will until outraged nature can endure no more and nervous prostration, or worse, follows the continued abuse?

The relaxing exercises also enable one to husband the nerve-force at the centers, instead of dissipating it in useless muscular contractions or movements. The jerky, twitching movements of nervous people reveal an opposite state; namely, weakness—lack of control at the center, and wasteful agitation, or tension, at the surface. St. Vitus's Dance is the extreme manifestation of this condition, but even it has been conquered by exercise.

Not all nervousness, however, is manifested by muscular agitation. One of its most dangerous

forms is that which might be termed unexpressed nervousness; it is shown forth in muscular repression instead of undue muscular activity. Repression is often followed by results more disastrous than those that come from the expressed irritation of the nervous system. How many business men, who have never acknowledged that they were nervous, suddenly collapse from nervous prostration or softening of the brain! Repression of nervous irritation is like damming up the water of a flowing stream; the time inevitably comes when the nervous, like the watery. current will assert itself and break away with destructive violence. Natural expression is the unimpeded current of the nerve-stream; relaxation is the sluice-gate for the relief of the pressure on the nerve-dams which our perverted habits of life construct.

We have need to know and to abide by the laws of physical economy as well as to grapple with the problems of domestic and political economy. Physical, like financial, economy must be exercised in regard to seemingly trifling outlays. Nervousness seldom arises from any one expenditure but from the continued repetition of numberless little extravagances. Unawares, we are daily creating our future physical conditions. Besides acquiring the power to relax, we need to have a wise and economical guidance of the nerve-force in action. Exercises for harmony of movement (see Outline for General Practice, Chapter I.) produce an effect, at once restful and invigorating to the system; when one is nervous or irritated, a few minutes' practice of these rhythmical movements is like "pouring oil upon troubled waters."

By continued practice, quiet, conserving movements become habitual, become a part of one's self. Not only can unbalanced nervous conditions be overcome, but every woman in her movements can manifest repose—which Ruskin calls "the most unfailing type of beauty." This beauty never belongs to nervous people; were they reposeful they would no longer be nervous, for the two states are direct opposites and can form no co-partnership.

In this age of unrest many people wear themselves out needlessly; sometimes well-intentioned motives may prompt erroneous action, and conscience become a tyrant. An exaggerated sense of duty leads many a woman to anxious, ceaseless activity; she feels that she must constantly be doing something, thinks that idleness is sinful—idleness, that Landor calls "sweet and sacred." Suggestive are the words of our poet-philosopher, Emerson:

Shun passion; fold the hands of thrift; Sit still—and truth is near.

XVIII.

EXPRESSION: REPRESSION.

LESSON TALK.

A man's body and his mind (with the utmost reverence to both, I speak it) are exactly like a jerkin and a jerkin's lining—rumple the one, you rumple the other.

-Laurence Sterne.

A PLEA for self-expression is only a plea for truth, sincerity, naturalness. Conventionality has much to answer for in the subjection of women to false standards. Society has said, and some fashionable "Finishing (?) Schools for Young Ladies" still say, that culture consists in repression, not expression; that it admits of no enthusiasm, no spontaneity, no show of feeling; these are "bad form" not to say "vulgar." Conformity to such standards robs people of individuality and naturalness. It dwarfs the mind, checks the sympathies, restricts the physical resources and narrows the life. Clearly, the true development of the powers of youth or of adults,

in or out of school, cannot be achieved through repression.

Self-expression is the very genius of any education that educates; the kindergarten philosophy recognizes the importance of it. Froebel's aim was to arouse and to call into activity all the latent faculties of the child through self-expression. Men and women are but children of larger experience and many, lacking facility in self-expression, have powers not only unawakened but unsuspected. "Man knows himself only so far as he makes himself objective." Self-expression is not only the great word with Froebel, but it is the word of natural development throughout the universe.

When development of faculties through expression is spoken of in this book, let it be remembered that expression of an inner state always is implied; not the assuming, by imitation, of outer signs which sometimes passes for expression and elocution teaching. Mr. S. H. Clark, the eminent teacher and reader, says: "Assuming the externals of an emotion will never call up an emotion that has not at some time been experienced."

Expression develops faculties as exercise develops muscles. By the expression of any sentiment, as hope or despondency, either by word or action, or by both, a quickening influence is exerted upon the faculty from which that sentiment arises. Nerve-cells that have once acted in a certain mode tend to further action in the same way; habit is born of this inherent tendency toward repetition. A person can encourage bad impulses by giving expression to them, until repetition forms bad habit and such habit becomes vice. Allow a girl habitually to express carelessness diffidence, self-abasement, disdain or arrogance by her physical bearing, and corresponding moral weeds are planted in her nature.

Likewise, higher expression culture becomes higher character building. If a boy in whom inherent vicious tendencies are apparent were led to outwardly express by words, tones and actions, the sentiments of kindness, courage, love, gentleness, self-respect, heroism, reverence—such expression necessarily implying that some degree of those sentiments had been first awakened in his mind—for some time each day during the years

of his early development, would not the effect be to stimulate into healthful action those faculties of his nature to which these sentiments were related? Such expression culture would cause him to do, to say, to think and, it is believed, at last, habitually to feel, worthy things. This would be true education; it would awaken new thoughts and feelings; it would change the individual by calling into action his latent powers.

But some may ask would not such training be repression of the seemingly natural inclinations of the boy; or, is it judicious to prevent the expression of bad qualities? It is believed that direct repression is never wholesome, morally or physically, in its final results. Fear or restraint never really reformed a person; such repression is a "prohibition that does not prohibit." Self-expression culture would not repress nor merely hold in abeyance the bad tendencies of a child; it would supplant them with something better; it would "overcome evil with good." As Truth is brought to the consciousness of any person, evil and error drop away as darkness disappears when light appears.

Psycho-physical discipline is necessary to over-

come a bad habit; new nerve-paths must be made in brain and in body. If, by a conscious act of the will, a person thinks and expresses courage enough times, he will gain the ability to instantaneously call up the antecedent condition of courage—to feel courageous; thus by a psychological law one may become master of his moods.

As expression develops so repression dwarfs. Thoughts, emotions, passions, that are unexpressed, unrecognized by their kindred in other men, and that are not reflected back to strengthen their source, deprive the faculties of their just education; worse, positive mischief, physical and mental, is wrought by such repression. To inhibit an emotion consumes more nerve-force than the expression of the same emotion would require; loss of exercise weakens the organs of expression, and the pent-up force works on the inner man, unhealthily. There is malformation within and decay without. The twisted and tortured shapes of trees obstructed in their natural growth typify the condition of such repressed faculties. The recluse in his life of repression grows morbid in nature, his muscles become flaccid, his eye dull. his face unmeaning. Solitary confinement brings imbecility or physical deformity, or both; it is self-suppression and "that way madness lies."

What is true of great emotions is true in degree of ordinary ones. People are impoverished in their vocabularies of feeling by too little, or the wrong, use of the organs of expression. They go through life misjudged, unappreciated and unhappy, because the real self is imprisoned.

The entire body must be made respondent if we would give all thoughts and emotions truthful representation. The training of isolated members, as for special or technical purposes, is inadequate. In tuning a piano, harmony is not established until the last string or part is adjusted. So with our bodily instrument, all parts must be in harmonious relation to one another. This secures unity, and unity of action signifies equilibrium, freedom, beauty.

The higher the emotion, the more complex and refined the motion that expresses it; the passion of hatred is expressed in simple, straight lines such as are used in fighting, while to express love requires the double curve or the spiral. Destruc-

tion is always easier and uglier than construction. Who has not felt his inability to express his worthiest impulses, and recognized the aggravating facility of expression which the unworthy ones have? Is there not an ethical need of an expression culture that shall free man from the influence of ages of repression and that shall aid him to spontaneously express his *best* self?

By some it may be claimed that there are no laws of expression by which the powers of man can be disciplined and developed; that any attempt to improve man in expression must fail; that each person should express all thoughts and feelings in his own untutored way. Were every person in normal condition, were his human instrument in tune and responsive to the touch of its master—the soul—then, indeed, expression culture except for special purposes would not be needed. But we are so far from that harmonious state, our bodies are so starched and incrusted in unnatural habits—the results of repression, tension, heredity and false standards-that our untaught way of expression is not Nature's way. Thus, in our so-called natural expression we are

often unnatural, untrue to ourselves, and we become incapable of expressing our perceptions and conceptions. It is needful to have the organism trained to a pliable, obedient and responsive condition, so that all the infinite variety of the individual character may find its ready and true expression.

There is no possibility that expression culture can reduce all persons to dull uniformity or extinguish individuality in expression. If this could be done, it would imply that man is like a hand organ where not only the manner of expression is mechanically adjusted but, likewise, all that is to be expressed; the intellect, the soul, would count for nothing. On the contrary, the body is merely the medium of expression. It is to the real man what a piano is to a musician; be it ever so fine and so well-tuned, it can only express what he feels. The more harmonious the body, the more natural and varied will be the expression.

In every kingdom there is unity, but not uniformity, of form and function; everywhere method and law are seen. Human nature could no more have been created devoid of method and law than could any other department of nature.

The physical organism obeys the laws of the pendulum, of gravitation, of hydrostatics, of light, of sound and of all the fixed principles of physics; the operations of digestion, of assimilation, of purification of the blood, are chemical.

Is it too much to ask of Science that she shall interpret the gestures, attitudes, bearings, tones and inflections of man, and disclose the laws by which these expressions represent the faculties, nay, more, how the thoughts, passions and emotions can be influenced? This is a part of the study of psychology upon which the scientific world is just entering. It is believed that psychophysical culture, based upon the Laws of Expression formulated by François Delsarte, will contribute to this knowledge.

The primary exercises outlined in this little book are of necessity corrective rather than educational. Even in these, whenever it has been possible, the motion has been related to an emotion; the attitude of the body to the attitude of the mind. There are no limitations to progress in this culture, for expression is as varied and as comprehensive as life.

XIX.

SUGGESTIONS TO THE SICK AND OTHERS.

The soul will not know either deformity or pain. We interfere with the optimism of Nature; we are begirt with laws which execute themselves.

-Emerson.

HEALTH and Self-Expression culture is more immediately helpful to persons who are ailing than to others; while it enables those who are well to remain so, it aids the sick in regaining health.

All inharmonies—and sickness is an inharmony—are caused by violations of law. We strictly obey civil or man-made laws but recklessly transgress the natural laws of our being which are of divine origin. A right use or operation of any part of the body is painless; a wrong use or operation is painful or will become so, sooner or later. Learning the right use of our bodies and gaining

an intelligent guidance of the nerve-force puts us in sympathy with the "optimism of Nature."

Dr. James H. Salisbury, the eminent microscopist, says: "Improper expenditure of nerve-force hastens and assists in maintaining unhealthy states." This expenditure is made not so much in overdoing, as in the *manner* of any doing. Tension is the universal physical spendthrift. It is believed that the chapters on "Relaxation, Receptivity, Recuperation," "Insomnia," and "Nervousness" will be specially helpful to the sick.

One of my pupils, a physician who had himself been a victim of nervous prostration, writes: "The relaxing exercises furnish the only natural nervine." It is not claimed that the relaxing exercises in themselves strengthen the nerves, as a nervine is supposed to do; they do, however, expressly save the nerve-force of the body, and they remove the obstructive condition—tension—that prevents the harmonious inflow and operation of the only direct nourishment of the nerves; namely, the vital energy. This recuperative force penetrates back of and beyond all pathological

conditions; this it is that repairs the broken bone, that replenishes the exhausted brain and body, and that cures all diseases.

We should never consider ourselves a fixed structure. Change is the law of life. Man's entire body is now believed to be renewed in much less than the proverbial seven years; if the tissues of the body are changed, so all conditions can be. We should not recognize limitations, for no one can estimate what he can do, or may become, until he works in sympathy with nature.

Some may sigh, "Oh, I haven't strength or patience to do any exercise; it would tire my mind." Any simple, well-directed exercise would not be as wearing as one's morbid thoughts of regret or self-pity, and such exercise would become the direct means of gaining more strength.

Of all persons, invalids most need to guard against the habit of introspection; they should rouse the imagination, get in sympathy with things outside of themselves, broaden their horizon. A gymnastic is an effective means to

this end, for by it one can come to look on himself as if it were not himself; he can become interested in the exercise and, even while doing it, not think of self at all. Thus, there is the physical benefit accruing from the exercise, plus this more subtile victory over self.

All who are able to walk can, by being judicious, gradually take all of the exercises in this book.

Full, deep breathing is excellent exercise for the sick. So beneficial is this mode of treatment that I wonder we do not hear of "breathing resorts." Respiratory exercises are helpful not only specifically, as in cases of weak lungs, but they have a constitutional effect; they are the universal tonic treatment. Some of the main purposes of exercises are to quicken the circulation, and to increase the digestive and excretory processes; respiratory exercises secure those results and also strengthen the abdominal muscles. If every invalid who reads these pages would practice Exercise XVII. in pure air, for five minutes, three

times a day for three weeks, a general if not a local improvement would be realized.

Relaxing exercises, instead of consuming strength, conserve it. Some of the simplest of these exercises, such as relaxing the eyelids, the lower jaw, the shoulders, the arms, can be practiced with very little effort. A person confined to his bed can gain marked control of the nerve-force by resting one elbow on something and holding the forearm, the hand and the fingers in a vertical line; then let only the fingers fall; lift them and let them fall again and again until the weight of them can be sensed; then let the hand fall but not the forearm; finally, the forearm. Even these exercises will produce a restful effect as soon as any degree of relaxation is attained.

Nervous persons sometimes declare that relaxing exercises make them tense; this is as absurd as to say that eating makes a man hungry. Not infrequently relaxing exercises make a person *realize* for the first time how tense he is, for powerful and prevalent as tension is, it is but little

recognized or understood even by those who are in bondage to it. To become conscious of the tension in one's body, albeit in itself unpleasant, is a great gain. We can no more rid ourselves of this suicidal physical habit before we are conscious of its existence, than we can overcome any other error of which we are unaware.

The nervous system is much wrought upon by a wrong use of the voice. How many teachers and public speakers first feel fatigue in the throat! Talking should no more tire the throat than it tires the tongue. Releasing the neck and the throat from tension decreases the fatigue, prevents irritation of the throat and makes the voice pleasanter in quality. A repressed or a high-pitched voice speaks from nerves that are taut. The quality of the tone often reveals more than the words do; words express the thought or the mental attitude, the quality of tone expresses the feeling or the emotive attitude. George Macdonald says, "How little men think, alas! of the duty that lies in tone!"

Self-Expression and Health culture in its entirety

treats extensively of the voice; tones and words are two-thirds of man's expression vocabulary, bodily movements are the other third.

We should take a few minutes' exercise as regularly as we take a morning bath. Perfection of execution comes only by repetition; new delights can daily be found in the practice of any exercise that develops refinement of muscular sense, nervecontrol and unity of movement. In proportion to the precision, ease and harmony acquired will be one's enjoyment of the exercises. In harmonious movements there is no tension and the nerve vibrations are free and rhythmical; hence the reactionary, uplifting effect.

Muscular development alone is insufficient; so also is relaxation alone. Extremes are always weak. Dr Winship, who by training increased his muscular strength so that he could lift over 2,500 pounds, died of nervous prostration. In this book much emphasis has been laid upon the relaxing exercises, because they meet the first need of many persons in this too intense age; but they

are not all that is necessary. No form of physical culture can be educationally complete that does not include exercises for relaxation, for energization and for harmony of movement.

Psycho-physical culture will not lead to satisfaction with one's self; it will, rather, provoke the "divine discontent" that leads to all high endeavor, to all growth. Browning says:

"Let us cry, 'All good things Are ours, nor soul helps flesh, more now, than flesh helps soul.'"

EXPLANATORY NOTE.

Emerson in speaking of Plato says, "It is fair to credit the broadest generalizer with all the particulars deducible from his thesis." It is fair to credit François Delsarte with much of the teaching in this little volume, for while the application and the letter have been changed, the principles and spirit are in accord with the most authentic records of this great man's work. Because the teaching herein relates more to health than to art, more to man's habitual expression than to dramatic expression, the term "Americanized" has been used.

The expansion of Delsarte's formulations was the inevitable result of their introduction into this country. The first instinct of the American mind is to make practical and to popularize whatever seems good and true. By Americanized Delsarte culture, then, is meant the Delsarte art of expression, so broadened, as to be of general benefit to all persons, instead of being only of

special benefit to one class—artists. Experience has proven that where one person is interested in "art for art's sake," one hundred are interested in health for health's and humanity's sake; by making prominent the utilitarian value of this culture, it is possible to bring the "greatest good to the greatest number."

In answer to many inquiries for information regarding Delsarte's life, I here insert from Johnson's "Universal Cyclopedia" part of a sketch written by me for that publication:

Delsarte, François: musician and investigator; born at Solesmes, France, Dec. 19, 1811. He was the son of a physician, but was early orphaned, and became a ragpicker in Paris; at the age of twelve he devised an original method of musical notation which attracted the attention of the musician Bambini, who adopted and educated him; he was admitted to the Conservatoire when fourteen, but, owing to pernicious training, his voice failed; forced to abandon the lyric stage, he became a teacher and an investigator. For about forty years he studied all phases of human nature and its expression, seeking a natural and scientific basis for all art, especially for orator-

ical, musical and dramatic expression. Leading artists, orators and philosophers sought his instruction. The King of Hanover conferred upon him the Hanoverian medal of arts and sciences, also the cross of a chevalier of the Guelph order. Fearing "unripe publicity," he would not permit the results of his researches to be published; the only records of his work are charts of his formulations and fragmentary writings. Although his philosophy lives mainly in tradition, it has become the acknowledged basis of the highest art criticism and culture. Died in Paris, July 19, 1871.





